Tamil Arasu

OCTOBER 1975 50 Ps.

Khadi Kraft – a trusted name for khadi and village industries articles

KHADI KRAFT offers a wide range of articles-artistic handicrafts to essential commodities. Available at over 200 Khadi Kraft Branches all over Tamil Nadu and Pondicherry.

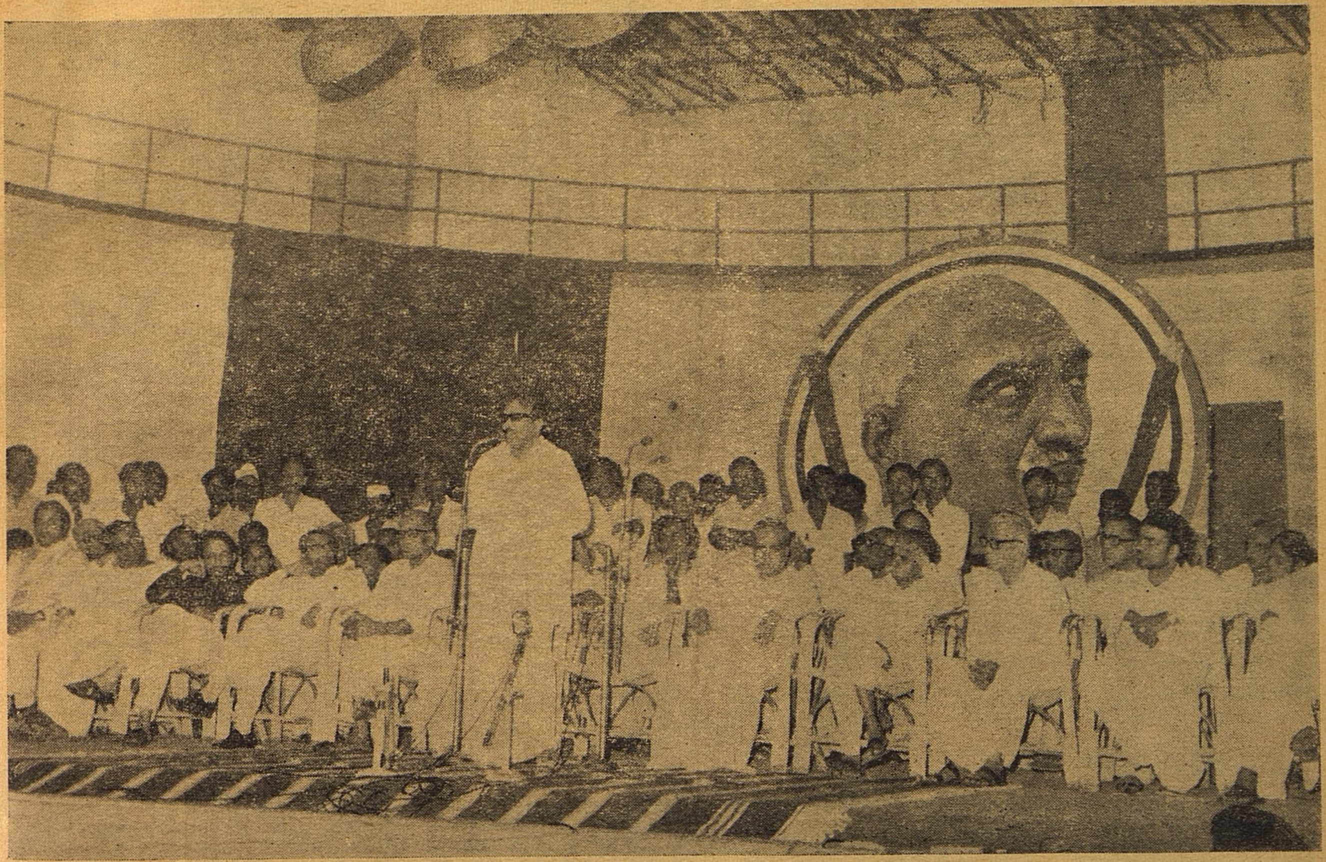
Khadi Kraft is Elegance Par Excellence.

TAMIL NADU KHADI & VILLAGE INDUSTRIES BOARD
KURALAGAM
MADRAS-600001.

For retail and whole-sale, contact Khadi Kraft at:

KURALAGAM	36C, ANNA SALAI	MADURAI MAIN ROAD	AVANASHI ROAD
MADRAS-600001	MADRAS - 600002	TIRUCHIRAPPALLI	COIMBATORE
Phone : 29684	Phone : 81954	Phone : 3814	Phone : 35051

THE TALL TREE FALLS



At the all-Party Public meeting to mourn the demise of Thiru K. Kamaraj held on 5—10—1975 the Tamil Nadu Chief Minister announced several memorials to perpetuate the memory of the late lamented leader, chief of them being the erection of a Mandapam of dimensions equal to those for Gandhi and Rajaji in Guindy.

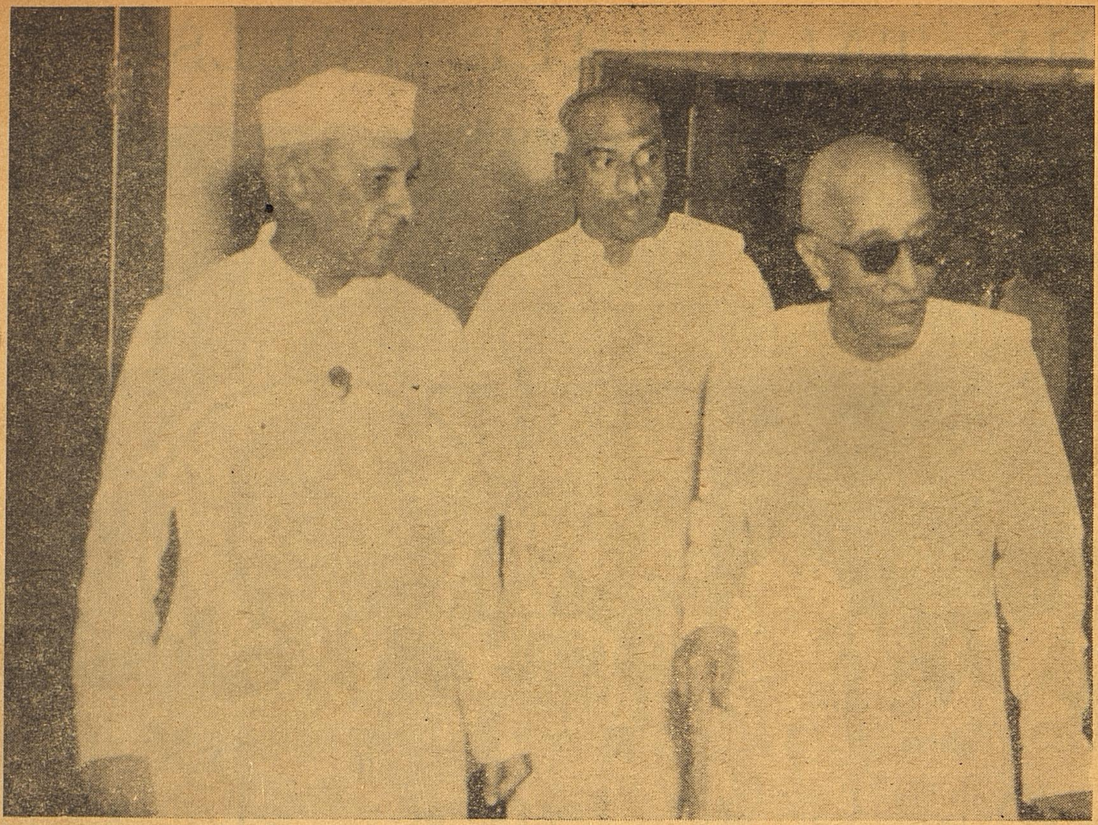
Tamil Arasu

VOL: VI OCTOBER, 1975 ISSUE: 4

CONTENTS

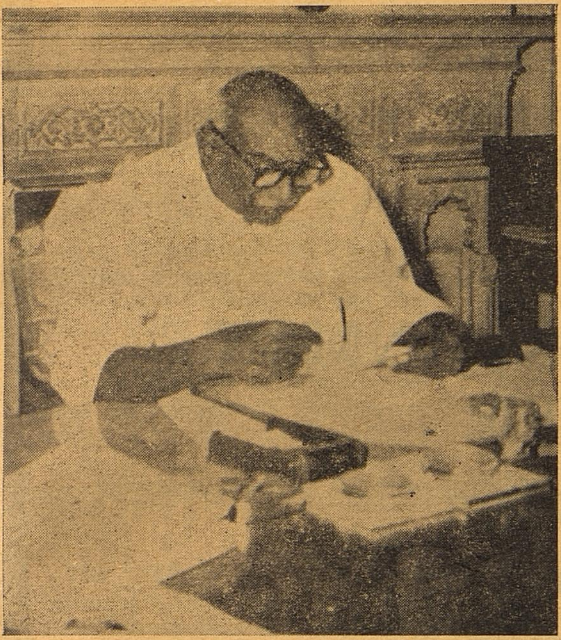
Homage to Kamaraj	4—6
Governor on Gandhi Jayanthi	7
Anna Memorial Police Medal Parade ..	8
Women's Progress Features	14—26
About Bronzes of Tamil Nadu	27—30
Tribute to Varadarasanar	36
C. M.'s Convocation Address	39—43

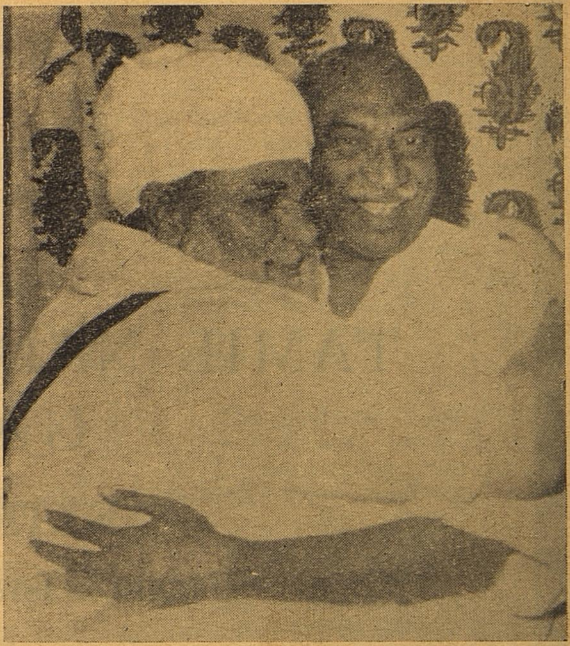
GREAT MOMENTS IN A GREAT LIFE

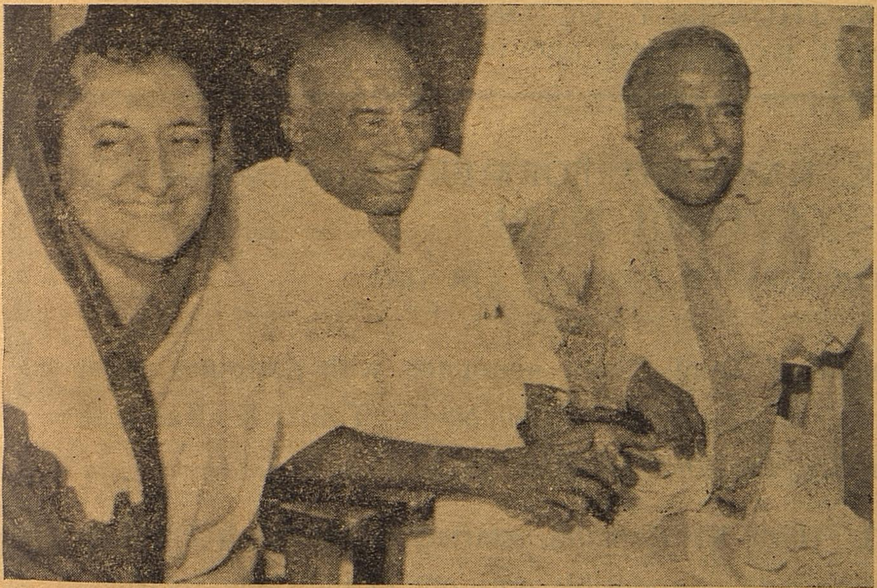


Picture on the opposite page and this page depict Thiru K. Kamaraj during the many years of his useful life in the Service of the Country. Above with Hellen Keller during a reception in Madras.

THE BEACON OF SACRIFICE IS EXTINCT





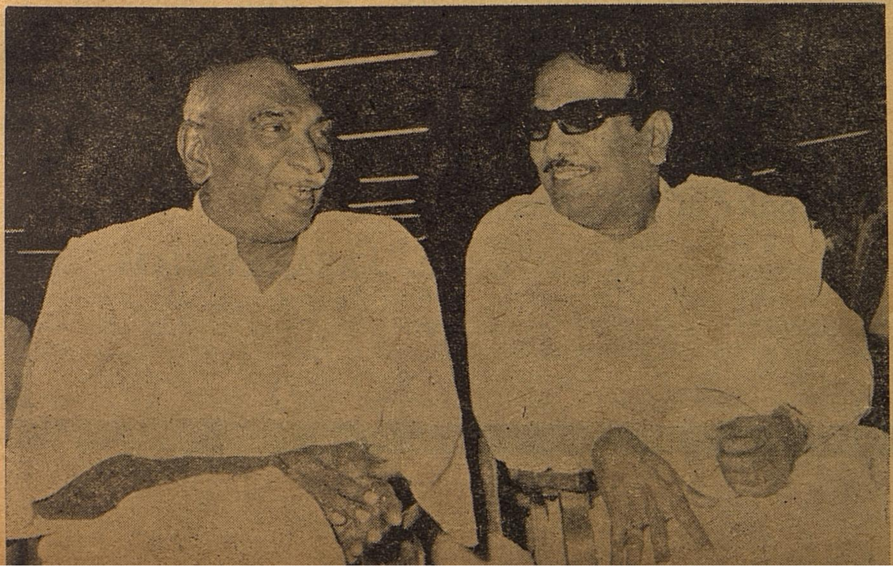


CONDOLENCE MESSAGES OF P. M. & C. M.

The Prime Minister Thirumathi Indira Gandhi, in a condolence message, said the passing away of Kamaraj " removes from our midst a remarkable personality who wielded considerable influence and commanded the respect of all sections."

" Starting life as an ordinary volunteer in the struggle for freedom, he rose to the highest positions in the Congress, the administration and in national life through sheer organisational ability and sturdy common sense."

" He was a man of the masses with wide experience of problems at the field and was dedicated to the cause of the poor and the weak. The manner in which he overcame all difficulties is a tribute to his inmate qualities and to the strength of our democratic system ", concluded the Prime Minister.



The Chief Minister, Thiru M. Karunanidhi, in his condolence message said : "The beacon of sacrifice is extinct. We have lost a leader, who had secured an abiding abode in the hearts of Tamilians, and one who had completely dedicated his life for the State's progress and for the nurturing of the democratic way of life in the country."

TAMIL NADU GOVERNMENT GAZETTE

EXTRAORDINARY

PUBLISHED BY AUTHORITY

No. 328 MADRAS, THURSDAY, OCTOBER 2, 1975
[PURATTASI 16, IRATCHASA (2006 TIRUVALLUVAR ANDU]

DEMISE OF Thiru K. KAMARAJ, FORMER CHIEF MINISTER OF TAMIL NADU

AN IRREPARABLE LOSS TO COUNTRY

The Government of Tamil Nadu announce with profound regret the demise of the former Chief Minister of Tamil Nadu, Thiru. K Kamaraj, at 3-15 p. m. on Thursday, the 2nd October 1975.

Born in 1903, Thiru K. Kamaraj, started his life as a Freedom Fighter and while occupying many responsible positions in the Congress party, he lived up to the highest traditions of Gandhian ideals. A great leader, he rendered yeoman service to the masses as the Chief Minister of Tamil Nadu from 1954 to 1963. The death of Thiru K. Kamaraj is an irreparable loss to the country in general and Tamil Nadu in particular.

(By order of the Governor)

P. SABANAYAGAM,
Chief Secretary.

We Will Bring Back Gandhian Enthusiasm To Our Economics

—:o:—

Tamil Nadu Schemes Show it is easy of Achievement

EXCERPTS FROM SPEECH

By

THIRU. **K. K. SHAH,**

Governor of Tamil Nadu.

Year after year, as Gandhi Jayanthi is celebrated, I get convinced, more than ever before, that there is an ever-increasing awareness in the minds of the people of India about the need to follow Gandhiji in strengthening the fibre of democracy and in building up a solid base for accelerated economic growth. **The unforgettable scenes of enthusiasm that I witness during Gandhi Jayanthi Celebrations at Gandhi Mandapam, Guindy, further convince me that the Government and that people of Tamil Nadu are entirely in tune with Gandhian philosophy in shaping an approach to social, economic and political issues.** The massive demonstration of faith in Gandhiji's philosophy, will, I am sure, herald a new era of understanding and prosperity.

The 20-Point Economic Programme announced by the Prime Minister is not only a reaffirmation of our faith in Gandhian approach but our determination to adopt it completely. Gandhiji's extreme concern for the common man was the talisman for ensuring equality, contentment and peace. Finding that the common man has not so far received a fair deal in spite of the implementation of Five Year Plans and other developmental programmes, the Prime Minister is now making determined efforts to look after the poor, the down-trodden, the backward classes, Scheduled Castes and Scheduled Tribes who constitute a large segment of our population. All these endeavours represent the quintessence of the ideals propounded by Gandhiji, the vision and far-sightedness of Pandit Jawaharlal Nehru and the dynamism of our illustrious Prime Minister Thirumathi Indira Gandhi. The steps taken so far, have yielded satisfactory results and the success achieved so far encourages us to look forward to the future with hope and confidence.

Last year, we entertained a fond hope of undertaking a pilot project for reconstruction of village economy. We now feel confident that it won't take long before the project gets under way. **We have selected a group of ten villages with the help of the Government and active assistance of Gandhigram and preparations are afoot to collect statistics. We are about to draw up plans to ensure that every family becomes economically viable.** We feel that the State and the Central Governments have announced sufficient measures to make our task lighter. If we can take advantage of the Government's anxiety to take industries, especially small scale industries, to backward areas, the task will not be heavy. We are happy that intellectuals and service institutions like Lions Clubs are eager to assist us. We propose to train a cadre of dedicated workers who after initial training and imbued with Gandhian ideals of service and sacrifice, will study conditions in villages and prepare a blue print for self-sufficiency and self-reliance. We propose to utilise the energy and idealism of our younger generation and build up future leadership inspired by Gandhian ideals.

Never before there was greater necessity than today to rembmer that non-violence and truth alone can convert the present trying times into 'Anushashan Parv' as respected Vinobaji has righly observed. Discipline alone can ensure settled conditions for ensuring economic growth and informed electorate. Freedom of speech and action will then cease to be a slogan and everybody's freedom of speech and action will become compatible with the freedom of speech and action of others ; we will then think of responsibilities first and rights later on. As Gandhiji said : "All rights to be deserved and preserved come from duty well done", and right means should be adopted to secure right ends. These basic tenets are woven into the very texture of our culture and civilisation. Those foreign powers who criticise us to-day will realise in no time that had it not been for the promptness with which the situation was handled, truth and non-violence would have been a heavy casualty.

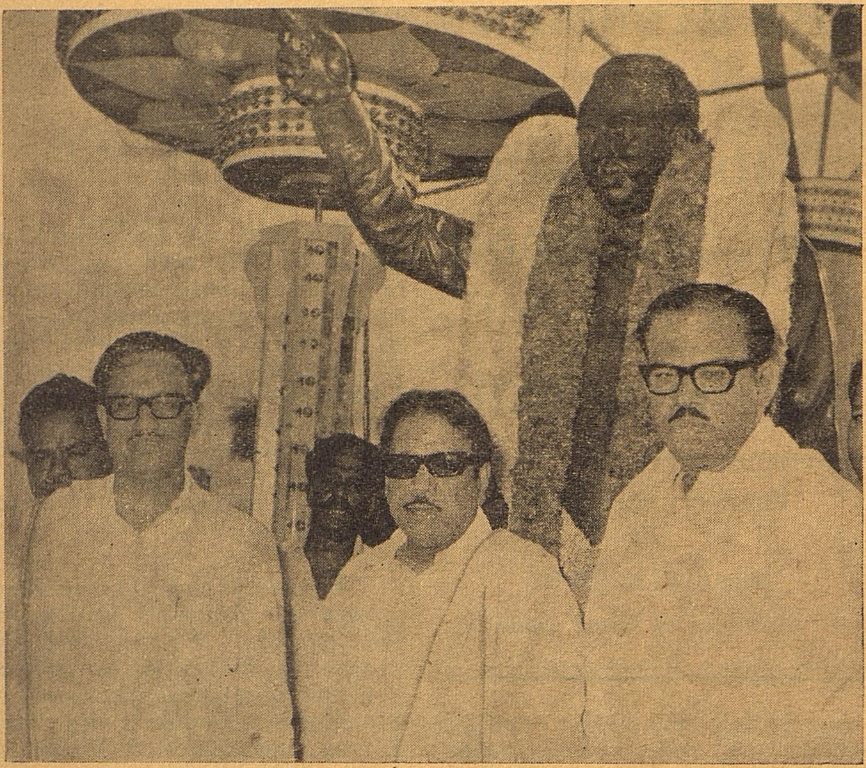
This year, the Government of Tamil Nadu have been good enough to participate in the celebrations by running an eye camp and initiating slum clearance programme. The Government are also providing a Library-cum-Museum Building at Gandhi Mandapam so that the large number of visitors to Gandhi Mandapam can draw inspiration and the younger generation can be nearer to Gandhiji.

We are taking up important aspects of Gandhiji's programme for discussion. We propose to emphasise that Prohibition can succeed if people understand the benefit of Prohibition and adopt it as a creed. Let us remember what Mahatmaji said — "Prohibition means a type of adult education of nation and not merely a closing down of wine shops." **The Government of Tamil Nadu have given the lead by introducing complete Prohibition as a vital economic programme. Let us pledge ourselves to make it a success** They have also taken several measure to eradicate the scourge of untouchability. They have to be supplemented by the active participation of the people. We propose to highlight the point that the cause of women's emancipation can succeed only if the vast masses of women in rural area are made literate and aware of their rightful status in society.

These celebrations will have no meaning if they do not sustain the enthusiasm of the people to back these programmes which were nearer. to Gandhiji's heart. To remember Gandhiji is to rededicate ourselves to his ideals and to recapture the imagination of the masses by reviving his constructive activities. Let us pledge ourselves to be his worthy followers.

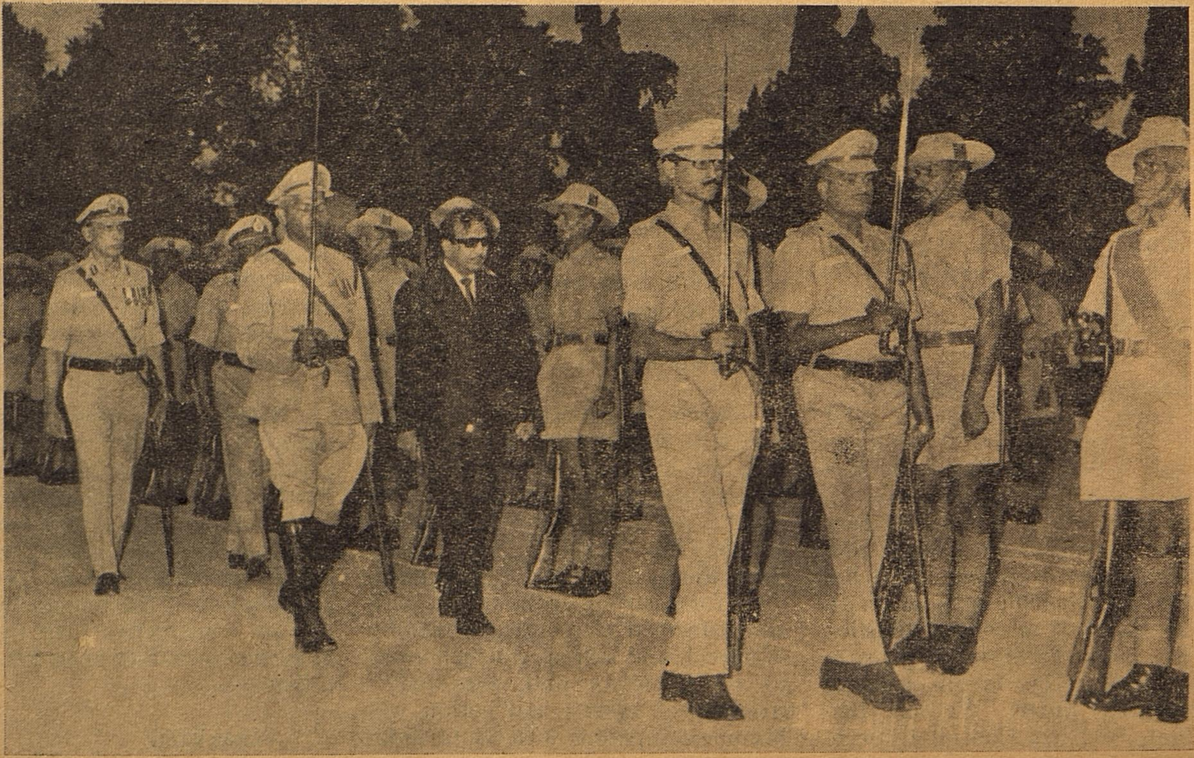
Vanakkam.

Dedication Anew



The Birthday of Anna is a land-mark in Tamil Nadu. For the Chief Minister and his Cabinet Colleagues the day begins with dedicating themselves to service of the State by formally garlanding the Anna Statue on Anna Salai, Madras. Most of the programmes aimed at promoting the welfare of the people are formally given a start on the day. This year saw the complete eradication of the State run raffle, thus putting an end to all forms of gambling in the State. This measure has evoked widespread respect for the State in all parts of the country. Gallantry Awards to Police personnel are also presented each year at a ceremonial parade. The awards have been instituted in memory of the Late Chief Minister Dr. C.N. Annadurai.

Picture alongside shows the Chief Minister Dr. M. Karunanidhi Dr. V. R. Nedunchezhian and Thiru K. Anbazhagan, Health Minister near the Anna Statue on 15-9-1975. Picture below shows the Chief Minister, arriving for the ceremonial parade for presentation of the Tamil Nadu Chief Minister's Police Medal for Outstanding Service/Gallantry on 14—9—75 at the Police Parade Grounds, Vellore.



Police Medal in Memory of Anna

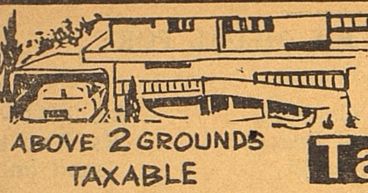
AWARD OF TAMIL NADU CHIEF MINISTER'S POLICE MEDAL FOR OUTSTANDING SERVICE/GALLANTRY.

The following members of the State Police Service and Subordinate services of the Tamil Nadu Police and the members of the Tamil Nadu Fire Service have been awarded the Tamil Nadu Chief Minister's Police Medal for outstanding service/gallantry on 14th September, 1975 by the Governor of Tamil Nadu and the recipients are eligible to draw lump-sum grants at the rates noted against each :

Names	*Lump-sum grant*
1. Thiru V.G. Manoharan, offg. Superintendent of Police, Directorate of Vigilance & Anti-corruption, Madras.	No grant
2. Thiru C.V. Chandrasekaran, Deputy Commandant, Tamil Nadu Special Police II Battalion, Avadi.	No grant
3. Thiru R. Subbarayan, Deputy Superintendent of Police, (Category II) and Asst. Commissioner of Police, Headquarters, Madras.	Rs. 3,000/- (Rs. Three thousand only)
4. Thiru S. Motha, Deputy Superintendent of Police, (Category III) Tamil Nadu Special Police, I Battalion, Tiruchirapalli.	Rs. 3,000/- (Rs. Three thousand only)
5. Thiru M.M. Vasudevayya, Deputy Superintendent of Police and Asst. Commissioner of Police Madras.	Rs. 3,000/- (Rs. Three thousand only).
6. Thiru V. Natarajan, Deputy Superintendent of Police, Directorate of Vigilance & Anti-corruption, Madurai.	Rs. 3,000/- (Rs. Three thousand only)
7. Thiru S. Vellingiri, Deputy Superintendent of Police, Prohibition Enforcement, Coimbatore.	Rs. 3,000/- (Rs. Three thousand only)
8. Thiru G.K. Srinivasan, Divisional Fire Officer.	Rs. 3,000/- (Rs. Three thousand only)
9. Thiru S. Myilswamy, Inspector of Police, Directorate of Vigilance & Anti-corruption, Salem.	Rs. 2,000/- (Rs. Two thousand only)
10. Thiru K.K. Ashokan, Inspector of Police, Vigilance Cell, High Court Coimbatore.	Rs. 2,000/- (Rs. Two thousand only)
11. Thiru C. Muniyandi, Inspector of Police, Madras City.	Rs. 2,000/- (Rs. Two thousand only)
12. Thiru K. Ganesan, Inspector of Police, Food Cell, C.I.D., Cuddalore.	Rs. 2,000/- (Rs. Two thousand only)
13. Thiru K. Ramadoss, Inspector of Police, Special Branch, Chingleput.	Rs. 2,000/- (Rs. Two thousand only)
14. Thiru V. Jayaraj, Inspector of Police, Aruppukkottai.	Rs. 2,000/- (Rs. Two thousand only)
15. Thiru C.R. Natanam, Deputy Inspector of Police, Thanjavur West.	Rs. 2,000/- (Rs. Two thousand only)
16. Thiru A. M. Ghouse, Reserve Sub Inspector, Tiruchirappalli.	Rs. 2,000/- (Rs. Two thousand only)
17. Thiru M. Manivelu, Asst. Sub-Inspector of Police, North Arcot District.	Rs. 2,000/- (Rs. Two thousand only)
18. Thiru S.M. Nagulan, Head Constables 282, Food Cell, C.I.D., Madras.	Rs. 1,000/- (Rs. One thousand only)
19. Thiru M. Natarajan, Head Constable 1657, High Court Vigilance Cell, Madras.	Rs. 1,000/- (Rs. One thousand only)
20. Thiru M. Muniswami. Fireman Driver 554.	Rs. 1,000/- (Rs. One thousand only)
21. Thiru S. Raman Pillai, Police Constable 1768, Directorate of Vigilance & Anti-Corruption, Tirunelveli.	Rs. 1,000/- (Rs One thousand only)
22. Thiru C.N. Subbarayalu, Police Constable 1754, Traffic, Madras City.	Rs. 1,000/- (Rs. One thousand only)
For Gallantry (Or other Distinguished Services) :	
23. Thiru C.I.P. Dhanaraj, Dy. Superintendent of Police, Crime Branch, C.I.D. Madras	Rs. 3,000/- (Rs. Three thousand only)
24. Thiru R. Daksinamurthy, Sub Inspector of Police, Crime Branch, C.I.D. Madras	Rs. 3,000/- (Rs. Three thousand only)
25. Thiru C. Pola Reddy, Police Constable 1706, Tamil Nadu Special Police, Vth Battalion, Avadi.	Rs. 3,000/- (Rs. Three thousand only)

The Chief Minister Dr. Kalaignar M. Karunanidhi presented the awards at a special Police Parade held at Vellore on 14-9-1975.

The Tamil Nadu Chief Minister's Police Medal was instituted in 1969 in memory of the late Chief Minister Dr. C.N. Annadurai.



A follow up of PM's Economic Programme

Tamil Nadu.

To restrict the holdings of urban land, the urban land tax raised so as to lay the basis for URBAN CEILING — a step towards the socialistic society.

- Classification has been made as *residential* and *non-residential*
- Rates of taxes have been revised.
- Exemptions given already reviewed

The broadest shoulders should bear the heaviest burden

A helping hand to weavers in woe

Rs. 16.5 crores worth of yarn given to weavers by Co-optex and Tamil Nadu Handloom Finance Corporation.

Rs. 15. 8 crores worth of stagnant handloom cloth was taken over by Government and marketing done by Government agencies.

A unique scheme to provide security benefits to handloom weavers is being introduced. If a subscriber to this scheme dies before the age of 55, his family will get the amount paid by him towards this scheme plus a sum from the Government along with interest. Also an amount equal to this sum will be paid by LIC.

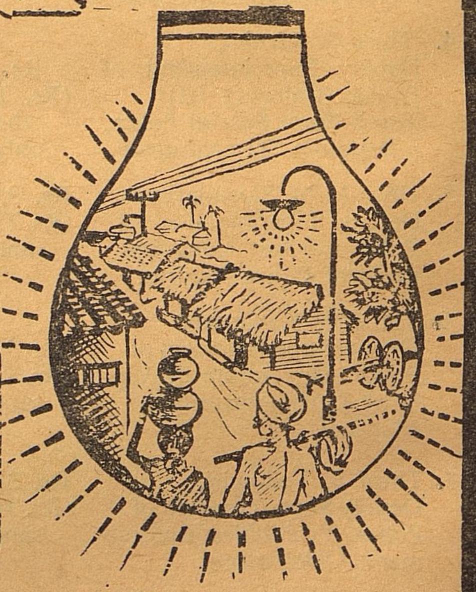
Tenancy laws and house-sites for Agricultural Labour

- Registered tenancies-3,99,350
- Total area covered-6,03,898 acres.
- 7.19 lakh acres of cultivable lands assigned to 3.6 lakhs of landless poor.
- Ownership rights to house-sites conferred on 1.74 lakhs of people—major beneficiaries being harijans and backward classes.
- Government lands for house-sites so far given to five lakhs of persons.
- Amount spent to acquire 2.36 lakh house-sites for harijans — Rs. 4.42 crores.
- Amount spent during last 8 years for acquiring 83, 968 house-sites — Rs. 2.03 crores.

DEBT

Moratorium to weaker sections

- In 1972 debt relief given to all agriculturists ryots and tenants, labourers, wage-earners.
- In 1975 January, debt relief given to all agriculturists. No creditor can institute a suit in a court of law. Payment of interest postponed.
- In 1975 July, debt relief given to non-agriculturists also. No interest will accrue for debts incurred on 22nd July 1975—from 22nd July to 15th January 1976. Pawnbrokers cannot sell the goods pledged. Interest is waived for six months. Millions of poor have thus been saved from tyranny of indebtedness.



Electricity in every village

Up to 1967 only 20,250 villages and 4,354 harijan colonies had received electric supply.

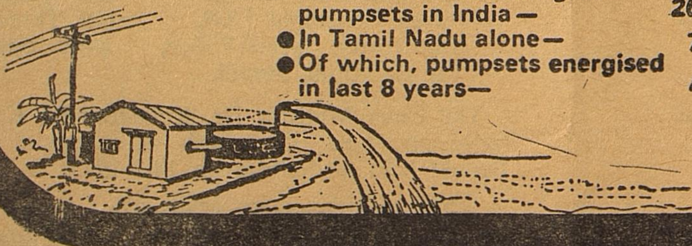
In the last 8 years alone:

- 40,985 towns & villages and
- 19,574 harijan colonies

have received electric supply.

Unique record of 7 lakh energised pump-set connections

- Total number of energised pumpsets in India — 26,50,889
- In Tamil Nadu alone — 7,13,312
- Of which, pumpsets energised in last 8 years — 4,23,409



HOW TO RECOGNISE THE POISONOUS WEED PARTHENIUM

Parthenium (*Parthenium hysterophoru*) a pernicious weed variously known as ' Congress grass ', ' Gajara grass ' (Carrot grass), ' Chatak Chandani ' (Star flowered) and ' Phendarphuli ' (white flowered) is considered to be a dangerous plant causing health hazards to human beings besides being detrimental to growing of crops.

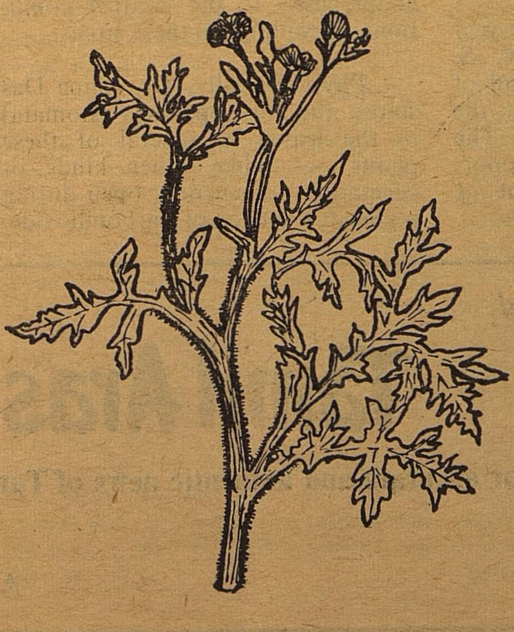
Skin Specialists have reported eczema caused by the weed are beyond medical cure and it might damage lungs, eyes and nose etc. The first symptom is itching sensation around the eyes, spreading to the joint of elbows, the back of the knees and front nect leaving the broken skin to let in germs causing complications. Ultimately it leads to the death of human lives. The pollen grains of the weed which floats in the air are reported to have caused several allergic type of diseases like dermatities fever and asthma.

Parthenium (*Parthenium hysterophorus*) belonging to the family ' Compositae ' is an erect erect herb, having white cap like flowers growing to a height of 1 to 1.5 meters, resembling the carrot crop.

Scientists and farmers have reported the presence of the fast spread ing weed in several places like Poona Bangalore, Jammu and Kashmir. This has now spread to Coimbatore particularly within the city limits and around.

Parthenium (*Parthenium hysterophorus*) can easily be eradicated by burning, removal by digging and destroying etc. It can also be controlled by spraying either 2, 4-D or MCPA at the rate of 2 kg. a. i/ha dissolved in 900 litres of water. For fully matured plants a mixture of 2, 4-D and Paraquat at a 2 kg. a. i/ha each, will be more effective for the control of the weed. All the chemicals are available in the market

For effective control of this dangerous weed, (*Perthenium hysterophorus*) control campaigns in the affected areas are to be organised creating social consciousness among the public. Health Departments, Universities and all public departments should work together chalking out programmes to prevent the killer weed. The Tamil Nadu Agricultural University will be happy to render necessary facilities in identifying, the weed and in demonstrating control measures. For further particulars kindly address the Director of Extension Education, Tamil Nadu Agricultural University, Coimbatore -3.



GETTING RID OF UNWANTED SHRUBS

TIRUPATHI BOTANISTS SHOW THE WAY

By

Bhaskaran Thomas

Semi-arid climatic conditions prevail over a third of India's land area. In these regions, there is scanty rainfall and the vegetation is unproductive, sparsely grown thorny shrubs.

Botanists at the Sri Venkateswara University in Tirupati, are presently looking for ways to eradicate these unproductive plant species. By doing so they hope that more productive crops and grass can be grown on the cleared land.

At the head of the five-year research endeavour is Dr. V. S. Rama Das, Professor and Head of the Department of Botany at the Sri Venkateswara University. The United States Government is supporting the study with a grant of Rs. 253,000 from PL-480 funds.

For their experiments, the Tirupati botanists have taken up a vast area at the foot of the nearby Thirumala Hills where there are as many as fifteen species of woody and thorny shrubs.

Dr. Rama Das says that mechanical means like use of bulldozers, were tried and found ineffective for clearing these plants. There was re-growth within a year after clearance and this was due to the fact that these woody shrubs have deep roots which could not be destroyed by bulldozing, he points out.

Hence Dr. Rama Das notes, one of the alternatives found by his research team for eradicating these shrubs was use of chemicals. " We have tried ten different chemicals and found that two are the most effective on a majority of the species we have here in Tirupati, " he says. One of them is called 2, 4 5-T (Weedone) and the other is Paraquat (Gramoxone).

Dr. Rama Das says that these chemicals have been successfully used in the defoliation of the woody shrubs. In the case of a few species, re-sprouting did occur after four-five months. " However, " he notes, " after repeated applications it is possible to exhaust the organic reserves in the plants which are stored in the stems and roots and effect their eradication."

According to this professor, the arid zone plants have special characteristics like thick outer covering, short leaves, thorns and also a thick coating of waxy material on the outer skin which help the plants to adapt easily to the weather conditions prevailing in these areas.

Physiologically, Dr. Rama Das states, the tiny openings (stomata) in the leaves of several of these plants — unlike other kinds of vegetation — generally open during nights for intake of carbondioxide. This helps to prevent loss of water through evaporation during the day from the scorching heat of the sun.

" Now, " Dr. Rama Das says, " we want to nullify some of the adaptive characteristics of the thorny bushes as a method for their eradication." This, he adds, can be done by using chemicals to control the leaf openings.

The Sri Venkateswara University scientists have found that 2, 4, 5-T and Paraquat (Gramoxone) help to control the leaf openings. Actually, Dr. Rama Das says, these chemicals enhance the size of the leaf openings. This helps to increase the transpiration rates and thus cause loss of water in the plants leadings to their death, he adds.

Their studies have also shown that certain other chemicals can be used for preventing the formation of the waxy outer covering of these woody shrubs. These chemicals too, Dr. Rama Das observes, can cause severe loss of water in plants.

As far as the replacement of the woody shrubs with more productive grass varieties is concerned, Dr. Rama Das says that work is still at a conceptual level. His research team has already observed one aromatic grass growing interspersed with the thorny shrubs. When this was grown at the university's botanical gardens, it was found to have profuse growth. " Therefore we feel that we can perhaps replace the woody species by this grass," he adds.

He further states that this grass, when tender, can be used as fodder for livestock and as thatching material for hutments. Several other kinds of millets can also be grown in the arid areas after eradicating the woody shrubs because millets require less water. " This would go a long way in improving the rural economy of this area and other semi-arid lands," the Tirupati botanist predicts.

Read

Tamil Arasu

For accurate and authentic news of Tamil Nadu.

Single copy Re. 0·50
Annual subscription Rs. 6·00

AIMS OF OUR FAMILY PLANNING PROGRAMME

GOVERNOR'S MESSAGE FOR FAMILY PLANNING FORTNIGHT

The necessity for preventing population explosion has been recognised the world over, but our country was the first officially to introduce a massive family planning programme. In view of large population comparatively meagre resources, low standard of living and tardy economic development, uncontrolled population growth has a severely crippling effect on our development. If this population growth rate, popularly known as "population explosion" were to continue any longer, there is very little scope or hope of improving the present low standards of living. Whatever savings and capital formation are possible under the circumstances, will be consumed by millions of additional mouths that are added every year. The Government of India therefore wisely embarked on a national family planning policy and a population control programme, twentyfour years ago, as an integral part of our development plans.

Our family planning programme aims at reducing the birth rate. We must remember there is a sharp decline in the death rate, on account of better medical facilities, control of communicable diseases, introduction of preventive public health measures and the wide use of anti-bacterial drugs. The programme, being a voluntary one without any element of coercion, provides enough option for adopting any one of the approved and tested methods according to one's aptitude.

Even an ordinary man with common sense will agree that within the limited means available, vast masses of our people cannot look after more than two children. Modern ways of living have luckily created a psychology of making no distinction between son and daughter. A contained family is a continual feast. An unbridled growth of the family leads ultimately to a generation of malcontents who would pull down the fabric of society and all that we have been striking to build over the years since our attainment of independence.

The State Government has launched many incentive schemes of Social Security and other welfare measures which are meant to improve the quality of life of the people and safeguard their future. These programmes are not likely to have any impact unless growth of population is arrested simultaneously.

With a view to promoting effectively this national programme, the Government of India have introduced a package of health services which include nutrition, prophylaxis against Anaemia, blindness, Immunisation against Diphtheria, Tetanus and Pertussis (Whooping cough), B.C.G., Small Pox etc. to create confidence in parents that adequate measures are taken to ensure longevity and good health of their limited family and especially the children. This programme is calculated to prevent diseases and promote health among mothers and their children. Every mother who has become an active acceptor of family planning programme is provided with the aforesaid health package from the nearest Maternity Centre. I would like the importance and easy accessibility of this package of health made known to all the people through active and sustained propaganda in Children's clinics, private nursing homes, public and private sector hospitals, Primary Health Centres, Social Service Organisations, Madhar and Magalir Manrams and the like. The Lions and Rotary Clubs and other similar social service organisations could help in achieving the aim of limited family. I am told that the children and mothers who receive supplementary feeding at the centres run by the Social Welfare Department receive also the benefit of this health package programme.

Family Planning programme has now become a target-oriented programme and every year the Government of India fix a target for different methods of Family Planning. Tamil Nadu has been able to exceed the sterilisation target during the past 3 years consecutively. Monetary incentives have played a large part in promoting the sterilisation programme in this State. They have also assisted special intensive Family Planning drives which have involved all departments under the leadership of the Collectors. The Government of India have accepted time-bound programme to reduce the birth rate to 25 per thousand by the end of the 6th Plan. As a result, the birth rate for 1974—75 is estimated to be 28.5 per 1,000 population as against 30.7 per 1,000 population during 1971.

The twenty-point economic plan which our Prime Minitser has recently placed before the Nation has created a new enthusiasm amongst the masses and has revitalised their faith in the destiny of India and confidence in their ability to shape it. The best scientific talents in the country will, I am sure, help develop expertise and achieve a break-through in reproductive biology and contraceptive technology. Similarly I hope the private and public Sector undertakings will put their shoulders to the wheel and help create an atmosphere among their employees and their families for their wholehearted and willing co-operation. It is imperative that a systematic effort is made by educational institutions to attune the minds of the growing generation to the merits of the 'limited family.'

The Cine field has not lagged behind in assisting this national venture. I would, however, welcome the producers and directors to participate in a larger measure in this national effort and produce films and documentaries which would emphasize and highlight the advantages of a limited family. Other voluntary agencies can also extend their co-operation.

As you all are aware, this year is celebrated as the International Women's Year. The women play a pivotal role in creating healthy conventions and in imparting sense of urgency to every deserving cause. A limited family of two children would enable the mother to concentrate effectively on bringing them up and grooming them to be useful citizens of tomorrow. I am sure every woman in this country would realise how a large and unwieldy family not only affects the mental and physical well-being of the mother but also incapacitates her. Once she is incapacitated, the family loses its moorings. I therefore earnesly appeal to every woman of child-bearing age to participate wholeheartedly and cheerfully in this national programme. The success of the vasectomy camps held, for instance in Thanjavur district and Madras City, is so encouraging that we may plan such camps periodically in every district. I have no doubt that Tamil Nadu will set an example to the rest of the country.

EQUAL PAY TO MEN AND WOMEN WORKERS .

ORDINANCE ISSUED

An Ordinance ensuring " equal pay to men and women workers for the same work or work of similar nature," was issued to-day by President Fakhruddin Ali Ahmed.

Under the Ordinance no employer shall pay to any worker remuneration at rates lesser than those paid by him to workers of the opposite sex for performing the same work or work of a similar nature.

Where prior to the commencement of this Ordinance, different rates of remuneration were payable for men and women workers doing the same work or work of a similar nature, the higher or highest of such rates shall be the rate at which remuneration shall be payable, to all such workers on or from the appointed date.

To ensure that enforcement of equal pay for men and women workers does not lead to discrimination against recruitment of women, the Ordinance provides that no employer shall, while making recruitment to the same work or work of a similar nature, make any discrimination against women except where the employment of women in such work is prohibited or restricted by or under any law.

The proviso to this clause ensures that certain priorities/reservations in the matter of employment as for example, in the case of Scheduled Castes, Scheduled Tribes, ex-servicemen and retrenched employees, which have been accepted as a matter of public policy ,are not whittled down.

To promote employment opportunities for women, the Ordinance provides for the setting up of an advisory committees by the appropriate Government. The committee shall consist of 10 persons of which one-half shall be women.

It seeks to appoint officers to look into complaints of non-observance of the provisions and to decide disputes relating to similarities or otherwise of jobs.

Where an offence is committed by a company, every person who was incharge of and was responsible to the company for the conduct of the business of the company, as well as the company shall be deemed to be guilty of the offence.

Equality of opportunity and remuneration for women has proved a difficult target to achieve not only in the developing countries but also in the developed countries. India has made significant and sustained progress in promoting the interest of women. More and more avenues of employment, at all levels of skill and responsibility, many of them hitherto inaccessible, have been created for women. Their working conditions have steadily improved. These developments have not only resulted in increase in women's participation in economic activity but also bringing about a diversified pattern of participation. There is, however, still a wide gap in the opportunities and facilities available in general to women as compared to men.

One of the reasons for women being paid less than men is that most of the women are either unskilled or their vocational training is inferior to that of men, therefore, vocational guidance and training facilities need to be provided. It has been aptly said that in order to play their due role in the modern world women's education and training programmes should be so designed as not to confine them to feminine jobs but to give them equal opportunity with men in all fields. **The laws are on women's side but prejudices, hostilities and resistance still hold them back.** Therefore, it is necessary to set up an effective machinery for the implementation and enforcement of labour laws. The report of the ' Committee on the Status of Women in India,' subimtted recently, has recommended that a unit should be set up in each State to attend to matters concerning women's welfare and that the work of such units should be coordinated by a body at the Centre, Women have to organise to exercise their right to equality and mobilise public opinion. Last, but not the least, is the need for self-help. To quote a U.N.O. publication, " ...... Neither laws nor collective agreements nor other methods are automatically self enforcing. All require constant interest and supervision by those responsible for their enforcement and by those concerned with their enforcement. In particular, women themselves must be prepared and be alert to take full advantage of their economic rights as defined by law and contract. In the field of practical application, the trade unions have a particular important task, to perform. In many countries, they have carried out this task with skill and realism. The women's organisations chiefly concerned have also a highly importtant part to play."

The first modern organisation of women was started in 1917 by the great pioneering woman, Mrs. Margaret Cousins, in Madras under the inspiration and leadership of Mrs. Annie Besant and her Home Rule Movement, which was then a dynamic stream giving expression to the people's restless urge for freedom. Mrs. Besant was interned by the British Indian Government as a result of this agitation.

TheWomen's Indian Association, though functioning mainly in the South, became from its very inception a rallying point for women for action on an all India plane. One of its first ventures was to lead a women's deputation to Mr. Montague, then Secretary of State for India, touring this country in 1919 to formulate political reforms to meet the rising demands of India. The first world war then raging had lent urgency to the situation. Indian women demanded the franchise and the right to participate in the political life of the country. The deputation was led by Sarojini Naidu. In the 1926 elections women participated, but on restricted franchise.

Before long the Women's Indian Association took the initiative in launching the All India Women's Conference, the first mass Indian women's organisation to come into being. At first it sought to concentrate its attention largely on the question of education, but the field gradually widened.

INDEPENDENCE WOULD BE INCOMPLETE WITHOUT THE CO-OPERATION OF WOMEN

—GANDHI.

Gandhi held absolutely the view that men and women are equal. He felt that each is complementary to the other and one cannot live without the other's active help. He gave his earnest support to Indian women's movement. He made a sterner protest against child marriage and child widowhood. He deplored the criminal indifference of parents who kept their daughters utterly ignorant and illiterate and brought them up only for the purpose of marrying them off to some young man of means. Gandhi pleaded for women votes and for their equal legal status with men.

Gandhi said that " men have considered themselves to be lords and masters of women, instead of considering women as their friends and co-workers. Wives should not be dolls and objects of indulgence, but should be treated as honoured comrades in common service. To this end, those who have not received a liberal education should receive such instruction as is possible from their husbands."

The dowry system has to go. Marriage must cease to be a matter of arrangement made by parents for money. The only honourable terms in marriage are mutual love and consent.

Widow re-marriage is no sin, if it be, it is as much a sin as the marriage of a widower. All widowhood is not holy. It is an adornment to her who can observe it.

In a plan of life based on non-violence, woman has much right to shape her own destiny as man has to shape his. Independence would be incomplete without the co-operation of women."

The resources of women power remained untapped for hundred years. He made them secure equality with men before law and politics. Gandhi had played a notable role in the emancipation of women. He brought women straight out of the social barricades. During the civil disobedience movement, women, some of whom had till that day never ventured outside their households, could be seen sitting openly on stools outside liquor shops or foreign cloth shops, quietly, composedly plying their little hand-spinning wheels. Such was the potency of Gandhi's appeal to the hearts of Indian women that scores responded to his call.

In a political awakening brought about by satyagraha, women had been largely emancipated and bore their due share in the national life of India.

Writing about women Gandhi said, " women are special custodians of all that is pure and religious life. Conservative by nature, if they are slow to shed superstitious habits, they are also slow to give up all that is pure and noble in life.

Dear sisters, the future of India lies on your knees, for you will nurture the future generation. You can bring up the children of India to become simple, God fearing and brave men and women or you can coddle them to be weaklings, unfit to brave storms of life and used to foreign fineries which they would find it difficult in afterlife to discard."

To be short, at Gandhi's clarion call Indian women left their sheltered hearts and homes in thousands to take part in the freedom struggle. Shoulder to shoulder with their men folk, they picketed liquor and foreign cloth shops, braved the police brutalities and courted heavy jail sentence. Since independence women enjoy the same freedom and opportunities in public life as men do and they are eligible for the highest office in the country...

" Faith is the function of the heart. It must be enforced by reason. The two are not antagonistic as some think. The more intense one's faith is, the more it whet one's reason. When faith becomes blind, it dies ", declared Gandhi. —*From the Book*

"Thy will be done"

by Dr. E. K. Swamy

Women's Rights under the Constitution

With the advent of independance, a new impetus was given to social reforms for women. The constitution granted them equality of status and opportunity and the fact that there should be no discrimination on grounds of sex is enshrined in the Fundamental Rights. The Directive Principles of State Policy empowered the state to make special provisions for the progress of women. There are, in fact, a wide range of constitutional and legal provisions to protect and safeguard the interests of women from exploitation. Legal disabilities with regard to marriage, divorce, inheritance, guardianship, adoption, etc., have also been removed by the enactment of laws such as Special Marriage Act of 1954, the Hindu Marriage Act 1955, the Hindu Succession, Adoptation and Maintenance Act of 1956, Abolition of Dowry Act of 1961, etc.

In the past two decades, the country has made spectacular strides in promoting the interests of women. There is today for example no profession or academic body in India where women have not entered and have not made a mark ; Women have held outstanding positions. In civic bodies eminent women have been elected as Mayors in metropolitan cities. There are women ministers, legislators, judges, lawyers, engineers, architects, sculptors, writers and artists. Women have increasingly started venturing into new venues of public and private employment, such as the Indian Administrative Services, the Indian Police Services, as mountaineers, pilots, etc. There are women in the armed forces including even a contingent of parachute jumpers trained in medical relief. In broadcasting and television, several women find themselves in executive positions Thus, women are beginning to influence the functioning of the mechanism of the state in several spheres, very rightly fulfilling the prophecy of Gandhi.

From times immemorial, women in India have been working in the active economic field and at homes

though not in the strict sense of earning wages. 'The traditional village community in India consisted of the cultivators, the artisan, and those performing menial services. In each of these, the women played a distinctive and accepted role in the process of earning a livlihood for the family putting in sometimes more, sometimes less but often an equal amount of labour in both production and marketing of products of agriculture and handicrafts." In the early days of industrialisation women-folk belonging to the lower strata of the society sought employment in the plantations, mines and factories which had a strong rural base. In agriculture, women have been traditionally working shoulder to shoulder with men. With the planned economic development and spread of industrualisation in the post-independence era, the participation of women in economic activity was quite marked. Articles 16 (1) and 16 (2) of the constitution grant the right of equal opportunities in regard to employment to women along with men without any distinction. The constitutional and legal measures have been taken not only to protect women from exploitation, but also to secure their increasing participation in different fields.

EMPLOYMENT.

According to 1971 census, the total female working population was 31.3 million or about 17 per cent. of the total working force of 180.4 million. The bulk of the women workers (25.1 million or slightly over 80 per cent.) was employed in agriculture. Of the rest, 7 per cent. were engaged in industry (household industry 4.4 per cent, and other than household industry 2.6 per cent.) 3 per cent. in plantations, orchards, fishing, hunting and allied activities and mining and quarrying, 7 per cent. in services and 3 per cent. in other spheres such as construction trade and commerce and transport and communication.

The percentage distribution of women workers by industry divisions during the 1961 and 1971 censuses is shown in Table I.

The tables shows that about 80 per cent of women workers in both the census years were engaged in agriculture and only about 20 per cent. in non-agricultural pursuits. While the percentage of women in household industry declined sharply from 7.7 per cent. in 1961 to 4.4 per cent in 1971, it improved in other industries.

TABLE I

Sl. No.	*Industry Division*	*Percentage Distribution* 1961	1971
1.	Agriculture (cultivators and agricultural labourers)	80.0	80.0
2.	Industry :		
	(*a*) Household	7.7	4.4
	(*b*) Manufacturing other than households ..	1.3	2.6
3.	Plantations, orchards, fishing, hunting and allied activities mining and quarrying ..	2.0	3.0
4.	Services	7.0	7.0
5.	Others (construction, trade and commerce, transport and communication)	2.0	3.0
	TOTAL	100.0	100.0

ONE CANNOT EXIST WITHOUT THE OTHER ; SO THE RIGHTS SHOULD BE ENJOYED EQUALLY BY BOTH MEN AND WOMEN

The highest number of women employees in the organised sector are found in Tamil Nadu, next only to Maharashtra and Kerala. As on 31-3-74 there were 2.41 lakh women employees in Tamil Nadu Constituting 14.7 per cent of the total workers in the State against 11.3 per cent for All India Compared to the previous year, the number of women employed in the organised sector registered an increase of 2,659 persons.

These are certain occupations which attract female workers most. About 75 per cent. of the urban female workers are engaged in the following 19 occupations which is shown in table II.

The occupation which attracts the maximum number of urban female workers is teaching followed by the category of labourers. Barring the categories of teachers, clerks and nurses, all other occupations are such as do not have any educational pre-requisite. In the decade 1961-71, female employment rose in the first 9 occupants, but fell in the remaining 10. Increase of women workers has been the highest in clerical jobs followed by teaching and nursing Women in these white-collared occupations, however, constituted less than 3 percent of the total women workers, in 1971. **It is also noticeable that women folk are losing interest in those occupations which require manual labour and that their entry into occupations which have certain educational standards as pre-requisite has shown a rising trend.** Women teachers in Universities and colleges have shown tremendous growth followed by high school teachers. Women have also started entering high positions in increasing number. The number of women administrators and executives at the centre rose from 1,811 in 1961 to an estimated 3,100 in 1971 ; physicians and surgeons from 5,600 to 41,100 ; dental surgeon from 200 to 500 ; lawyers from 450 to 1,300 ; and accountants and auditors from 650 to 2,100.

The Public sector offered the maximum number of employment to women in Madras City (22,518) while the private sector offered the maximum number of employment to women (29,308) followed by the Nilgiris (22,137). The trend disclosers the conclusion that in urban sector the learned occupations and in the rural sector, the plantations and textile industry offered more scope for women employment.

TABLE II

Occupations popular with female workers, their percentage to total and percentage growth

Sl. No.	*Occupation*	*Percentage to total urban female workers* (1971)	*Percentage increase* (+), *decrease* (—) *during* 1961—1971
(1)	(2)	(3)	(4)
1.	Clerk, general	2.89	+ 146.48
2.	Teachers	14.91	+ 93.55
3.	Nurses	2.45	+ 55.90
4.	Ayahas, Nurse-maids	1.07	+ 44.33
5.	Well diggers and construction labourers ..	1.73	+ 41.39
7.	Plantation Labourers	1.39	+ 21.03
8.	Cook and cook-bearers	2.74	+13.40
9.	Bidi makers	5.23	+ 5.47
10.	Sweepers, cleaners, water-women ..	5.35	— 1.56
11.	Merchant and shopkeepers—retail ..	5.51	— 7.73
12.	Tailors and dress makers ..	1.40	— 22.92
13.	Weavers and related workers ..	4.75	— 24.51
14.	Butlers, bearers, waitress and domestic servants ..	6.82	— 27.61
15.	Street vendors, canvassors and news-vendors ..	1.38	— 36.31
16.	Laundrywomen, washer-women and dhobie ..	1.83	— 44.29
17.	Basket weavers and brush makers ..	1.41	— 45.66
18.	Labourers	8.81	— 57.59
19.	Spinners and winders	3.31	— 58.74

Of the total female workers 65.9 per cent are illiterate. Of the literates, per centage of those who have attained the matriculation standard is the highest i.e., 33.13. The percentage of those working women who have educational levels below graduation is 82.75 ; only 17.25 per cent are graduate and above.

Organised and Unorganised Sectors :

The organized sector accounts for employment of 6 per cent of all women workers. Of these, a little more than half (3.3%) or 10.9 lakh women are employed in factories.

In the factory industries, under the Factories Act, 1948, a falling trend has, by and large, been observed in the decade 1963-72 in respect of women employment which came down from 4,00,364 in 1963 to 3,90,269 in 1972, bringing down the per centage of women to total factory workers from 10.37 to 8.73 per cent. During the decade about 88% of the women workers in the Factory Sector were employed only in 7 states, namely, Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu and West Bengal, while in terms of industry groups only 3, namely, ' Food except beverages '. ' Cotton textiles ' and ' Tobacco including beverages ' were responsible for maximum number of women workers during this period.

> **Gandhi said that "The wife is not husbands' bond slave, but his companion and his help mate and an equal partner in all all his joys and sorrows - as free as the husband to choose her own path".**

Next in importance to factory industries are the plantations, covered under Plantations Labour Act, 1951, which provide considerable employment to women in the country. However, women employment in plnatations also declined over the years from 3,87,899 in 1968 to 3,80,085 in 1972. During this period (1968-1972) women employment rose in coffee, rubber and other plantations, but fell in tea plantations. Of the 3,80,085 women plantation workers in 1972, as many as 88.3% were in tea plantations ; 6.8% in coffee plantations ; 3.6% in rubber plantations ; and the remaining 1.3% in other plantations. In that year the maximum number of women workers in tea plantations was employed in the states of Assam (1,76,858 i.e., 52.7%) and West Bengal (87,600 i.e., 26.1%) In coffee plantations the bulk of women employment was in Karnataka (11.861 i.e., 45.9%). In rubber plantations, Kerala was responsible for maximum number of women workers (12,860 i.e., 93% In other plantations also bulk of women workers were in Kerala (3,248 i.e., 68.8%).

While plantation, forestry, etc., manufacturing and services divisions taken together as well as individually covered a large chunk of women employed in private sector, in public sector the service division alone claimed bulk of women employment. **In both the sectors, Southern Zone employed the largest number of women employees in 1974 (42% in private sector and 30% in public sector). Of the women employees in the public sector. Central Government employed 8.2%;; State Governments 42% Quasi-Government establishments 15-5% and Local bodies 34.3%. While primary and middle school teachers and professional, technical and related work-workers are largely concentrated in the public sector, there is predominance of craftsmen and production process workers and unskilled workers in the private sector.**

VOLTAS
Oh God! These insects have ruined my crop!
Don't worry, I will show you a remedy.
You see, how effective this insecticide is!
Wonderful! With a single insecticide all kinds of insects are destroyed.
Yes. Zolone is such an insecticide. It is unique—gets rid of all kinds of insects.
zolone® gives complete protection from pests and helps grow better and healthier cotton.
ZOLONE—the integrated insecticide that destroys all kinds of pests
Marketed by: VOLTAS LIMITED Chemicals Division
Bombay Ahmedabad Secunderabad New Delhi Calcutta Madras Bangalore
HT-VT-8803(A)

TAMIL NADU LEGISLATIVE ASSEMBLY CONSTITUENCIES 1975 FURTHER INCLUSION OF NAMES IN THE ELECTORAL ROLLS

The Electoral Rolls for all the 234 newly delimited Assembly Constituencies in Tamil Nadu were revised with reference to 1—1—1975 as the qualifying date and were finally published on 28th February, 1975. The Electoral Rolls so published have come into force from the date of this publication. The Final Integrated Electroal Rolls of 1975 are available for the convenience of the public in villages, panchayats, municipalities and other places for inspection.

They are open to inspection by the public at the offices of the Electoral Registration Officers concerned, *viz.*, the Revenue Divisional Officers, Personal Assistant (General) to the Collector of the Nilgiris, Commissioner, Corporation of Madurai, Commissioners of Salem, Coimbatore and Tiruchirapalli Municipalities so far as districts are concerned and the Revenue Officer, Corporation of Madras for the Madras City. Full particulars regarding the electoral rolls, can be obtained from the Office of the Electoral Registration Officer.

All attempts have been made to ensure that correct particulars are entered in the electoral rolls in respect of the voters. However, it is just possible that in a few cases, some errors or omissions may have crept in, in respect of some voters. In order to remove such defects in the rolls, the public are requested to inspect the rolls and apply under Sections 22 or 23 of the Representation of People Act, 1950 to the Electoral Registration Officers for the correction of the incorrect entry or for transposition of entry in the rolls or for inclusion of name in the rolls, in the appropriate forms, details of which can be had from the Electoral Registration Officers.

The prescribed fee for preferring in application is 10 paise in the case of applications to the Electoral Registration Officer and Rupee one for appeals to the Chief Electoral Officer against an order of the Electoral Registration Officer under Section 22 or 23 of the Representation of People Act, 1950. The fee shall be remitted into the Treasury or the Reserve Bank of India or its agents under the head of account "065. Other Administrative Services-*b*. Elections C.Other Receipts—Union." The challan should be enclosed with the application in proof of the fee having been deposited. The fee can also be paid in cash to the Elêctoral Registration Officer or to the Assistant Secretary to Government Public (Elections) Department, Fort St. George, Madras—600009, in case of appeal.

Tips To Women—For Those Over Forty

For women over forty, in addition to the ordinary routine, special exercises are recommended for strengthening and envigorating the facial muscles, intensifying the blood circulation, and consequently improving the complexion.

These exercises must be done every day after the usual daily dozen, Make yourself comfortable in a chair in front of your dressing table. The skin has to be well cleansed first, and a hot compress would be very good — with water or with an infusion of herbs. Once the exercises are done, wash your face lightly with cold water and put on some cold cream. Repeat the exercises two or three times the first few days, then gradually increase to ten times. Here are some of the simplest and most useful exercises :

For the eyes :

(1) Close your eyes tightly, count to three and open them wide.

(2) Shut your eyes tightly and open them wide, holding the outer corners down with the tips of your forefinger and middle finger.

(3) Slowly roll your eyes, first left then right.

For the double chin :

(1) Put your elbow on the table and cup your chin in your hands. Now press down on your hands with the whole weight of your head.

(2) Put a pencil in your mouth, thrust out your chin and draw circles in the air with the pencil, first clockwise then counter-clockwise.

(3) Thrust out your chin and make a semicircular motion with your head from one shoulder to the other (the shoulders must not be raised).

For the neck :

(1) Turn you head from right to left, then from left to right.

(2) Keeping your mouth closed, press your tongue hard to the roof of your mouth, then relax the pressure.

(3) Sit up. Turn your head as far right as you can, face front, turn it to the left in the same manner.

The older the woman, of course, the more painstaking the care she must take of her skin. And it must be done under the constant supervision of a beauty-parlour physician. In extreme cases, when the process of ageing continues despite conventional treatment, surgery may be resorted to.

Many will ask, if it isn't too late to start worrying about one's face at that age ? No, it is never too late. And please remember that in preventing premature ageing and preserving the freshness and attractiveness of the face and body a lot depends on yourself.

—*Courtesy* : 'SOVIET UNION'

By

Yelena Ryzhkova

Of Saving Comes Having... Invest with

TNSC
BANK

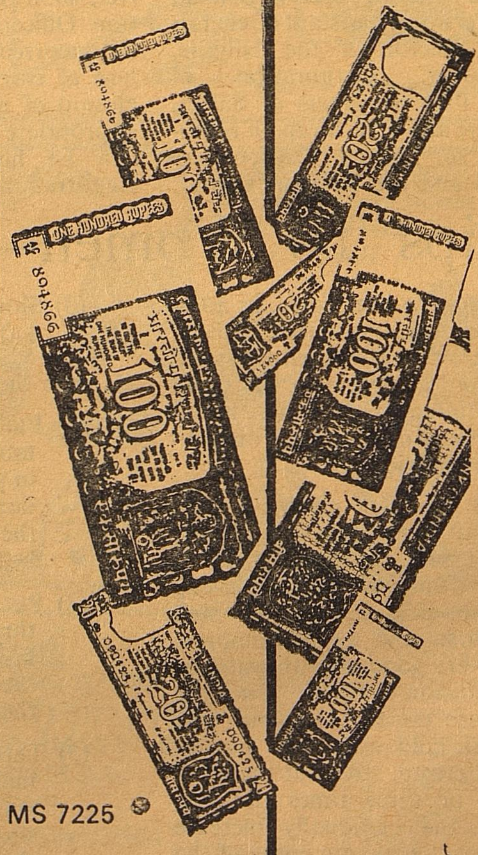
Our Revised Deposit Interest Rates :

1. SEASON DEPOSITS - for sums of Rs. 1000 and over : per annum
   - Deposits for 15 days to 45 days 3.25%
   - Deposits for 46 days to 90 days 3.75%
2. FIXED DEPOSITS - for sums of Rs. 100 and over :

Period	Rate of Interest per annum
91 days and above but less than 6 months	5.75%
6 months and above but less than 9 months	6.25%
9 months and above but less than 1 year	7.25%
1 year and above but less than 3 years	8.25%
3 years and above but upto and inclusive of 5 years	9.25%
Above 5 years	10.25%

3. SAVINGS BANK ACCOUNTS 5.75%
4. CURRENT ACCOUNT No Interest

WE HELP YOU TO SAVE MORE



The Tamil Nadu State Cooperative Bank Ltd.
379, N. S. C. Bose Road, Madras-600 001.
Grams: 'URBANK' Phone: 20367(3 lines) Telex: MS 7225

Branches at : Anna Nagar, Anna Salai (Kamadhenu) Anna Salai (Anna Silai), Ashok Nagar, Besant Nagar, Egmore, Gandhinagar, Greenways Road, Jawahar Nagar, Kellys, Mint, Mylapore, Mylapore Tank, Nungambakkam, Purasawalkam, Royapettah, Raja Annamalaipuram, Santhome, Shastrinagar, Shenoy Nagar, Thyagarayanagar & Triplicane.

TNSCB : 122/75

HOW TO SAVE BARREN MARRIAGES

ADVICE AVAILABLE IN GOVERNMENT ROYEPETTAH HOSPITAL

The striking advance in the Family Planning Programme in Tamil Nadu is often attributed to the very vigorous implementation of the Maternity And Child Health Programme ; evidently the small family idea has caught on simply because the very agency which advocates the small family is also taking such good care in ensuring the health and well-being of the children of parents who have contained their family size. This apart the Government which projects the idea that " the small family is a happy family ", is also alive to the fact that a childless family cannot be happy. Childlessness or infertility can be due to male or female factor. Infertility due to the female factor is easily dealt with in the Gynaecology departments of all hospitals ; infertility due to the male factor however needs a specific clinic. One such clinic has been running in the Government Royapettah Hospital, Madras. Some of the conclusions arrived at in the clinic are given below :

A society is composed of many families—the social and psychological welfare of a family is a sacred as society itself. It is common knowledge that the childless couple develop a complex in society and waste a lot of their time and energy in superstitions and fell a prey to all beliefs and quick treatments. It is to avoid this that the Government Infertility Clinic has been established.

Need for Investigation of Male partner:

Over long years in all cases of infertile marriage, the wife bore the burden of blame and she was despised, hated and maltreated for the " offence " of not bearing children. In over 400 cases studied by us at least 35 men got remarried for want of a child and in about 22 of them, they were found to be partly or solely responsible for the barren marriage. Hence it is necessary that in the year of women's liberation these unfortunate women, victims of such unnecessary second marriages could be spared. Hence it is necessary that the possible male factor in barrenness should spread to the masses so that more of them could resort to thorough investigations before resorting to remarriage. **However there seems to be a general awareness among the urban population in that 60% of males invrtigated by us have come within 5 years after marriage to assess their possible role.** From a figure given by one of the maternity hospitals in city at least one sixth of men who were advised investigation for their possible role in sterility refused to get investigated.

Though Genito-Urinary Surgeons by their training experience and technical facilities are capable of investigating the male factors, the first such organised offort was made by starting an exclusive clinic for this purpose in July 1974 at Genito-Urinary Surgery Department of Government Royapettah Hospital. Over 400 males have been investigated who were referred from the maternity Hospitals and private Medical Practitioners. This clinical study involves thorough examination of the husband, semen analysis, Testicular Biopsy endocrine investigations and genetic studies. This clinical research programme is being carried out with the co-operation of the Department of Endocrinology and Dept of Genetics, University of Madras and Department of Pathology, Kilpauk Medical College. At present all the possible investigations for this study could be made at Madras itself.

Possible Male Factor Infertility:

In about 50% of them some clinical problem could be detected to account for Infertility—a figure comparable with other western countries.

Preventable Causes :

Small Pox:—Thanks to the energetic measures taken eradication of small pox from our country has been achieved However the sequell of small pox in early life could produce infertility in men.

Mumps :—(Swelling of the salivary glands due to a virus) occurring during adult hood produce inflammation of testis and unless promptly treated result in severe damage to the sperm producing tissues and result in Infertility *Venereal problems* (*Gonorrhoea and Syphilis*) and Tuberculosis affect the Testes and other sperm conduction channels and produce Infertility.

Undescended Testies.—For normal functioning of the tetis they should lie in the scrotom. Due to some reason, they fail to descend and remain intra abdominal with elevation of temperature and it affects spermatogenesia. **Thanks to the organised efforts by the Government of Tamil Nadu, through the school Health programme more children could be detected with this anomaly and corrected which if carried to adulthood would certainly produce Infertility.** We had 2.5%, Incidence of such cases in married males to whom no treatment could be offered. The possible role of filariasis and Hydrocele common in our parts, are being studied.

Treatable Causes of Infertility in Male:

Varicocele (Tortuous engorged veins of the testis that depress the sperm production) can be operated successfully and it improves the results, It is possible to correct the endocrine *deficiencies* with proper assessment by hormone studies. Indudicious use of hormones to be avoided.

Impotency Problems :

The problems of erection and ejaculation and the accompanying disorders do come within the scope of this study. In about 90% of cases they were found to be psychologically oriented. However a thorough investigation could be made to rule out any possible organic causes.

Artificial Insemination of Husband Semen.:

Though certain western countries have used artificial insemination of donor semen, they cannot be accepted in our country due to our social conditions. In those cases with substandard semen or mechanical disturbances. Artificial insemination of husband semen offers to be of success.

Dr. A. RAJASEKARAN

Genito Urinary Surgeon & Medical Officer, Male infertility clinic.

MEDICAL RESEARCH PROVES WEEK-END HOLIDAY DISASTROUS

When we in India are thinking of the 7-day work week in the context of the Emergency and labour unions are giving due consideration to the idea, authoritative support is put forward by one of the toughest critics of customary working hours and holiday arrangements in industrial countries, Professor Wolf Muller Limmroth, specialist in industrial medicine at the Munich University of Technology.

His demand for a revolution, in working hours at least, is based on recent studies by labour physiologists — the specialists who study man's performance graph. Even a two-day weekend wreaks havoc with the body's biological clock, they claim. By Sunday people are so far removed from the daily grind that Monday really comes as a jolt ; they have their work cut out getting back into the swing and output accordingly suffers.

It stands to reason that a three day weekend would upset the biological clock even more thoroughly. Countries thinking in terms of introducing a longer weekend would be well advised to shorten the working day substantially instead, the Professor claims.

Tests conducted with laboratory animals in Munich indicate that breaches of the biological rhythm or later harm health. After ten or fifteen years of strain caused in this way the heart and circulation begin to feel the worse for wear.

This damage is irreparable. Professor Muller-Limmroth is by no means surprised that " despite shorter working hours and longer holidays the number of people pensioned off early for health reasons is steadily increasing in industrialised countries."

Scientists have long known how this clock works. The body is at its most productive in the late morning, then backslides between one and two before peaking once more between four and six in the afternoon. " This second peak should be spent in relaxation at home or at a hobby rather than in battling one's way through the rush hour, which is what at present normally happens."

The Munich industrial doctor would thus prefer the work rhythm to resemble school, which in Germany starts first thing in the morning but for the most part ends at lunchtime — but which to the horror of the Anglo-Saxons has also a Saturday forenoon session. " When you work half-days six or seven days a week you can spend some time every day with the family' Professor Muller-Limmroth says.

The Professor also takes a dim view of short holidays (" two holidays of at least three weeks would be preferable "), but this ideas have yet to catch on with either employers or unions in Western Europe. Regardless of medical research, the two sides of industry are still thinking more in terms of a longer weekend. But India would find unexpected support from these medical researches.

BONE MEAL MEANS MORE GRAINS

Bone meal is an important organic manure rich in phosphoric acid. Bones consist of calcium, Phosphate and some organic matter consisting mainly of fats and proteins. Hence, they are a good source of lime, phosphorus and nitrogen. Bone meal is available to farmers in two forms, namely, raw bone meal and steamed bone meal.

Raw Bone Meal :

Raw bone meal consists of crushed, unsteamed raw bones. Its nitrogen content varies from 3.5 to 4.5 per cent. It contains about 7.9 per cent phosphoric acid and about 28.32 per cent lime. The percentage of phosphoric acid and nitrogen varies with the quality of bones and age of animal from which these are obtained. Normally, the bones of grown up animals contain more phosphoric acid and less nitrogen than those of the young ones.

Steamed Bone Meal :

Bones along with calcium phosphate also contain fats and proteins. The fat hinders decomposition. Therefore, bones are sometimes first treated with steam to remove fat before they are crushed. Steamed bones are more brittle and easy to crash, and at the same time they decompose more readily than the raw bones. Hence, steamed bone meal is generally preferred to raw bone meal. It contains 25 to 30 per cent phosphoric acid and one to two per cent nitrogen.

Steaming, however, removes a small proportion of nitrogen and, thus reduces the nitrogen content of the treated product. At the same time it increases its phosphoric aicd and lime content.

How to apply :

When applied to the soil, the bone meal decomposes, releasing phosphoric acid and nitrogen gradually for the crops. The bones should be ground fine, for it is only then that they decompose rapidly. Particles smaller than 2.3 mm in size are considered suitable for use as manure.

Bone meal is ideal for all types of soils. However, best results are obtained in acidic soils. It gives good results in light, well drained soils with good aeration. It is less effective on heavy clay and calcareous soils. It has particularly notable effects in soils which are well supplied with organic matter.

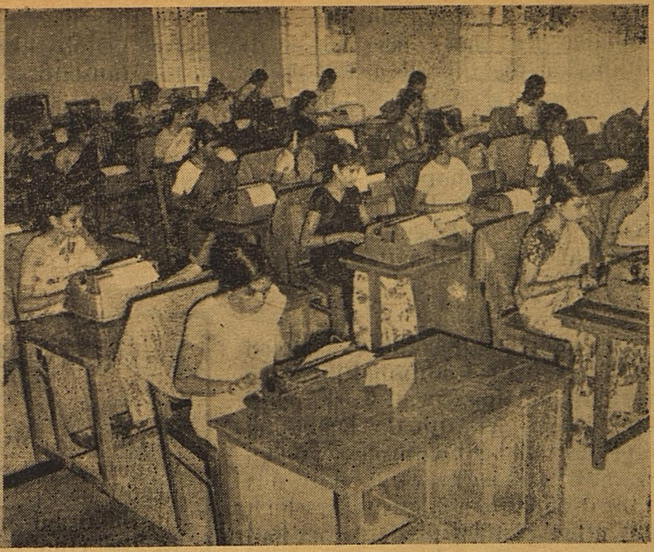
The lime in bone meal helps reduce the acidity of the soil. It is suitable for application to all crops. Being mainly a phosphoric fertilizer, it should be used in combination with nitrogenous manures and fertilizers.

Though it can be used for all crops, paddy, wheat and other cereals respond well to bone meal, particularly in acidic soils. Sugarcane, vegetables and fruit crops also respond to bone meal. You can also apply it to leguminous crops, pastures and grasses.

Time of application and Dosage :

It is best applied at the time of sowing or planting the crop. It should not be used as top dressing. It may be either drilled or broadcast into the soil.

The dosage will vary from crop to crop. Usually 100 to 200 kg. per hectare of bone meal is sufficient for most cereal crops. For vegetables and fruit crops a higher dose of 500 kg is needed. Always use bone meal with bulky organic manures like farmyard manure or compost. The nitrogen requirements of the soil should be met with oil cake or ammonium sulphate.



Newer and Better Vocations for women are opening up

EQUAL STATUS MAY BE A FAR CRY FOR WOMEN

But Government's Employment And Training Efforts Bridge The Gap

WORK OF EMPLOYMENT EXCHANGES

With a view to promoting the employment of women, the National Employment Service under the Directorate General of Employment and Training with its net-work of 535 employment exchanges and University Employment Information and Guidance Bureau offers placement services to women job-seekers and provides special assistance to them. Most of the employment exchanges have special section for women registrants and separate Live Register. Names of women applicants are submitted not only for jobs notified specially for women applicants but are also considered for other vacancies from the general pool. Employment officers visit the training institutions for women to give occupational information with regard to available employment opportunities. Heads of training institutions of women are supplied with Employment Market Information. Career Pamphlets and other occupational literature for the benefit of women candidates are brought out periodically. Special care is taken to give career talks in schools for both men and women specially at the delta stage which is a point of diversification of courses. Vocational Guidance and Career Counselling Facilities are available to women at a number of Employment Exchange and University Employment Information and Guidance Bureaux.

The number of women job-seekers on the Live Register of employment exchanges has been steadily rising and went up from 5,83,177 in 1971 to 9,73,066 in 1974. *i.e.*, by 67% which means more women are now entering the labour market. However, it may be pointed out that in 1974 women registrants were only 11.54% of total registration. The percentage of placement to registration in case of women in 1974 was 9.3 which compared favourably with the over all percentage (for men and women combined) of 7.7 per cent. Comparatively low educational attainments and that too in the traditional streams were to a large extent responsible for low percentage of placements in the case of women. Of the 9,73,066 women registrants in 1974 as many as 38.6% were either illiterate or below matriculates, 47.7% were matriculates and undergraduates, while 13.7% were graduates and post-graduates. Of these registrants, as many as two-thirds were without any professional or vocational training or work experience. Most of the women graduates and post-graduates belonged to Arts group and only very few had obtained their degrees in professional or technical subjects like engineering, medicine, law, etc. Some of the popular occupations in which women seek employment assistance are teachers, typists, general clerks, midwives, general nurses, etc. Besides employment of the unemployed, employment service has taken upon itself the task of imparting vocational guidance and employment counselling.

During the year 1974, the number of vacancies notified exclusively for women was 31,808, but only 28,044 could be filled and a large number of vacancies had to be cancelled even though sufficiently large number of vacancies had to be cancelled even though sufficiently

large number of candidates were available for the concerned occupations on the Live Register of the employment exchanges. This was due to non-availability of suitable persons and various other factors such as lack of mobility, socio-economic difficulties, lack of housing facilities, physical, cultural, sociological and technical patterns, family obstacles, etc.

Although women have occupied themselves with traditional jobs like teaching, nursing, social work, plantations, etc., yet with the beginning of professional consciousness women are now seeking various positions in the occupational hierearchy which only a few of their predecessors had attempted. There has been gradual switch-over of employment of women from traditional occupations to more remunerative and higher status jobs. They are now taking up professions of administrators, educationists, doctors, engineers, architects, town-planners, nuclear physicists, journalists, officers in community development projects and in many other professions. It is indeed a happy trend that educated women in India today aspire for a professional career. The increased opportunities for training and education have enhanced their employability. However, the opportunities for entering an occupation and progressing in it have not increased proportionately. In the absence of wage-paid employment, women have, in the recent past, sought self-employment in the form of domestic industries such as knitting and embroidery, tailoring, pickles and spice making. In addition, they have also engaged themselves in jobs like freelance journalism, translators, interpreters, commercial artists, fine artists, cartoonists and also some unconventional fields like hair dressers, beauticians, masscuse, tourist guides, etc. These jobs are becoming popular in bigger cities and metropolitan towns.

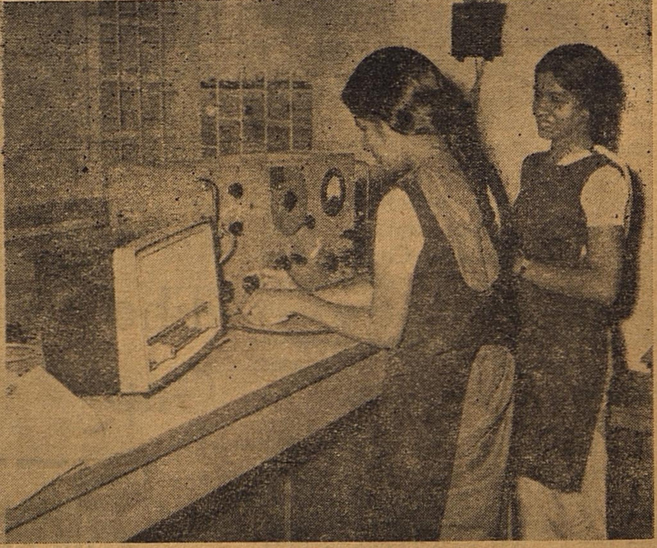
WOMEN IN SPECIALISED JOBS

The proportion of women employed in the organised Sector in 1971 was 6 per cent of the total women workers in the country with 2.7 per cent in industry and 3.3 per cent in the tertiary sector. The occupational classification of selected categories of women workers based on the 1971 census reveals that there were 55,000 administrative and executive officers, 23,800 physicians and surgeons, 16,000 social scientists and related workers ; 5,300 working proprietors, directors and managers, 2,500 engineering technicians, 1,700 jurists, 500 elected and lelislative officers, 300 aircraft and ships officers. The urban educated middle and upper class working women are emerging as a new social group. This, in itself is an indicator of the significant socio-economic changes taking place in India.

While the need for the women from lower middle class families to earn is basically to supplement their family income, the women from higher income groups have been entering various professions with a view to utilising leisure time or attaining social prestige and status. However, much has to be achieved so far as working women's role in society and their total fulfilment as professional individuals is concerned.

Vocational Training :

The extent of unemployment among the educated men and women with purely academic back-ground is high. It is obvious, therefore, that unless education for women is vocationalised we shall be adding to the mass of educated unemployed. For this purpose Government launched the Vocational Training Programme on a modest scale soon after independence. Since then there has been a steady growth of training centres all over the country. The number of Industrial Training Institutes (I.T.Is) including those exclusively meant for women has increased from 166 in 1961 to 357 in 1974. These provide training in engineering engineeringand non-trades. There are at present 54 (32 engineering and 22 non-engineering) trades in which training is being provided. There has also been a steady increase in the number of Polytechnics and Technical Schools which provides technical education at school and post-school level. The number of polytechnics in the country is 308 including 24 exclu-



Education and Training fit women for challenging tasks

sively meant for women. There are 160 other institutions, of which 80 are meant exclusively for women, which provide training in vocation trades. The actual out-turn of women trainees at various I.T.Is. in 1973 was 4,782 in non-engineering trades and 304 in engineering trades. It is proposed to enlarge and diversify the training facilities at these Institutes during the 5th Five-Year Plan, the primary object being to add new trades for which there is an increasing demand and to abolish the ones which have outlived their utility. Under the Apprenticeship Training Scheme training facilities are available to both men and women in 61 engineering and non-engineering trades in as many as 201 industries. Unfortunately very few women have availed these facilities and their number was just 104 as on 31st March, 1974. However, it is proposed to increase the number of trades from 61 to 150 during the 5th Five-Year Plan period.

Unorganised Sector :

As many as 94% of the women workers are engaged in the unorganised sector of the economy, 80% in agriculture and the rest in non-agricultural occupations. Next to agriculture the largest number of women, about 4 million are employed in various industries, trades and services including handloom, khadi and village industries, sericulture, coir and cashew industry. Workers in this sector include a varied assortment — unpaid family workers, attached, casual and contract labour, workers in fields, homes and workshops, self-employed, agents, wage workers etc. There is, however, a virtual absence of any reliable data —about number of workers, trends in employment, working conditions and prospects of recruitment training and development — relating to this sector.

Wages :

While steps are being taken to increase the employment of women and their employability in different spheres, simultaneous efforts are being made to bring the wages of women at par with their male counterparts. The equal pay principle has been enshrined in the Constitution of India as a Directive Principle to State Policy. The Government of India have also ratified I.L.O. Convention No. 100 regarding equal remuneration for men and women for work of equal value. The various Wage Boards, Industrial Tribunals and Wage Fixing Authorities under the Minimum Wages Act, 1948 kept it as a guiding principle while recommending wage scales. Various measures taken in this direction have no doubt fairly reduced the wage differentials but there are still disparities in various fields. In this context, mention may be made of the data thrown up by the Second Occupational Wage Survey, 1963—65 conducted by Labour Bureau in occupations in which men and women workers were employed in fairly large proportions The survey has revealed that the average earnings per day paid for in respect of men workers was relatively higher than for women workers in all the three important sectors of industrial activity, *viz.*, manufacturing, plantations and mining. Disparity was the highest in the manufacturing industries, with ' match factories ' topping the list where men earned about four and a half times more than women on an average. However, there were a few instances like that of the ' fine chemical industry ' where average earnings of women workers were reported to be higher than those of their male counterparts. In mines and plantations, men were earning consistently more than women but the dispartiy was considerably less in ' tea plantations ' while it was the highest in ' Iron Ore Mines.' Under the Minimum Wages Act, 1948, which empowers the appropriate Government (Central or State) to fix and revise the minimum wage rates of workers in the scheduled employments, the wages fixed/revised generally do not make a distinction between men and women workers but still there are some cases of differentiation between men and women in some employments. It will be of importance to mention that Government of India have appointed so far 22 Wage BorWage Boards (including Wage Board each for Cotton, Sugar, and Cement Industries) which ,excepting for Tea, Coffee, and Rubber Plantation, did not make any distinction between the wages of men and women workers. The Boards for these Plantations had narrowed down the disparities while recommending different wages for men and women workers.

Data on wages of women workers belonging to agricultural albour households in agricultural and non-agricultural occupations are available from the Agricultural Rural Labour Enquiries' conducted by Labour Bureau. According to the date of these Enquiries, average daily earnings of women in non-agricultural occupations have increased from Re. 0.62 in 1956—57 to Re. 0.92 in 1964—65 *i.e.*, by about 48 per cent. The average daily earnings

Plantations and Agriculture still offer the maximum job opportunities for women

in agricultural occupation increased from Re. 0.59 in 1956—57 to Re.0.95 in 1964—65. The actual average daily earnings of an adult agricultural women worker in agricultural operations remained below the lowest rate of minimum wages in the States of Uttar Pradesh, Madhya Pradesh, Kerala and West Bengal during 1956—57. But the position improved in the States of Assam, Gujarat, Maharashtra, Punjab and Tamil Nadu in 1964—65 when the earnings of womenagricultural labourers were above the statutory minimum rates of wages. But for a number of States like Uttar Pradesh, Madhya Pradesh, Bihar, Mysore and Orissa, it is observed from the results of the Rural Labour Enquiry (1964—65) that while the men's average earnings were within the range of minimum wages fixed, the womens' average earnings were less than the lowest minimum wages.

According to the observations of 'the Committee on the Status of Women in India' "........ differences in wage rates between men and women were present in both minimum and maximum rates for most occupations in different industries. There are, however, a few instances where the gaps have narrowed considerably or even become favourable to women at the level of minimum rates (jute-residual occupations, wool-darners, electrical machinery—industriess examiners Grade II, Machine Tool, Machinist (Gracde I). Even in such cases, the maximum rates for women are lower, leading to lower average earnings. The difference in wages rates of unskilled labourers or mazdoors and semiskilled worker like packer, loaders, unloaders, etc., support our view that prejudices, rather than skill or productivity differentials determine wage-difference between the sexes. In the plantations, the margin of difference is much smaller than in factories and there are cases where the average earnings of women exceed that of men. These are, however, exceptions. The other significant trend is in the case of electrical and engineering industry where women are found in a few operations of highly skilled type."

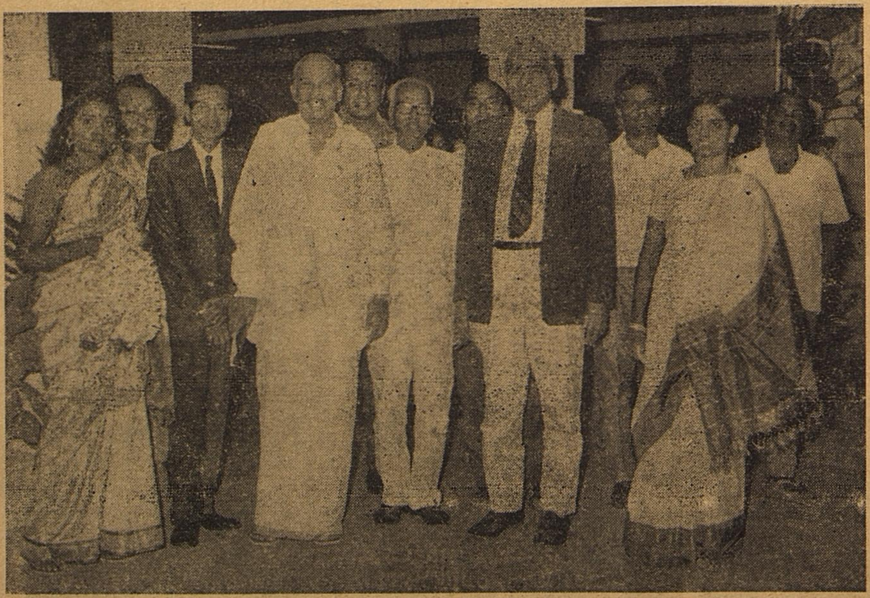
Working Conditions and Welfare :

Women workers require special treatment as they need more protection than men in their working environment in view of their tenderness, sensitiveness and their functions at home and specially the bringing up of future generations of the country. In India, positive steps had been taken from time to time and are being taken through appropriate labour legislation to provide healthy and congenial conditions to women workers at work places. The main inspiration for such legislation had been provided by the pasic standards formulated by the International Labour Organisation. The basic enactments regulating the working conditions, etc., of women workers employed in different sections of the economy are the Factories Act, 1948, the Mines Act, 1952, Plantations Labour Act, 1951 and Maternity Benefit Acts (State as well as Central). Besides ensuring certain minimum welfare facilities exclusively for women wor-workers, the Acts safeguard them against such evils as night work, excessive hours of work, under ground work in mines, maximum permissible load to be carried, employment during maternity and immediately after confinement, etc. They are not allowed to clean, lubricate or adjust heavy machinery while it is in motion nor are they allowed to handle excessively heavy weights. Further, the most valued and significant of the protective measures adopted for women employees in India, as elsewhere, are those dealing with maternity leave and other allied benefits. In addition, women workers enjoy certain other facilities/amenities such as medical, educational facilities, vocational training, etc., provided by the State Governments, Employers' Associations, Workers' Organisations and Special Welfare Funds for certain mines constituted by the Government of India, *e.g.*, Coal Mines Labour Welfare Fund, Mica Mines Labour Welfare Fund and Iron Ore Mines Labour Welfare Fund.

Women and Trade Unions :

Women workers, initially had not shown any particular enthusiasm in joining trade unions, interalia, due to social factors but their participation increased in the late fifties. On the basis of latest information available from the registered trade Union (workers' and Employees') which were submitting returns, the membership of women was 4,21,067 (8.2%) out of a total of 51,21,011 for the year 1968. Amongst the workers' unions States which normally accounted for sufficient number of female trade unionists (40,000 or above) during the same year, were Andhra Pradesh, Assam, Kerala. Maharashtra and West Bengal. Amongst workers' unions, the industry-groups which normally accounted for sufficient number (30,000 or more) of female trade unionists during 1968 were 'Manufacturing,' 'Agriculture,' 'Forestry,' 'Fishing,' etc., 'Mining and Quarrying' and 'Services,' It is ,however necessary that women workers should come forward in greater numbes to join trade unions and then only, these organisations can look after and fight for their interests in a more effective way.

Photo taken when Thiru K. Rajaram Minister for Transport released the Book, "Thy will be done" by Dr. E. K. Swamy (seen next to Minister) was released Excerpts from the book appear on p. 15.

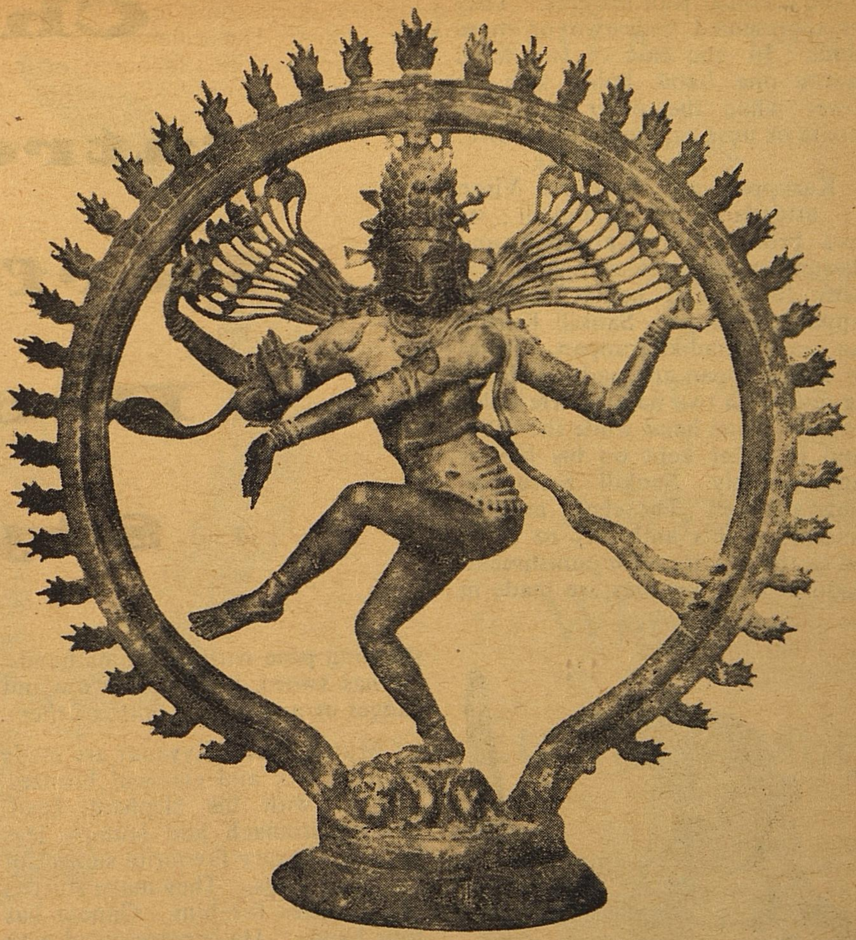


THE MANY FORMS OF TAMIL NADU BRONZES

By

K. LAKSHMINARAYANAN

Government Museum, Madras.



Chola Period Nataraja Bonze at Govt. Museum, Madras

Of the many contributions of Tamilnadu to the art world her bronzes occupy an important place. Bronzes of Tamilnadu can be studied under the three classifications : Primitive, Folk and Classical. Though primitive and folk bronzes are not collected and exhibited in the Museums as much as that of classical bronzes, there are bronzes in primitive and folk styles in Tamilnadu. The existence of folk bronzes from the time of Sangam period can be inferred from literary sources. Some primitive bronzes of prehistoric period have been obtained in Tamilnadu.

The term primitive bronze here stands for the bronzes made by the people who have or had primitive or tribal life. As the result of excavations conducted in Adichchanallur, a place near Tirunelveli, on the South bank of river Tamiravaruni, some primitive bronzes have been obtained. They are of birds, animals, and one small female figure. Cocks, Goats, Antelopes, tigers and elephants in bronze had been made by the pre-historic people of Adichchanallur for burial ceremonies. The features of the small female bronzes make us to consider her as mother goddess. A number of bronze terminals with branches containing small figures of birds and animals were also unearthed from this site. Some of these bronzes are kept in the pre-history gallery of Madras Museum.

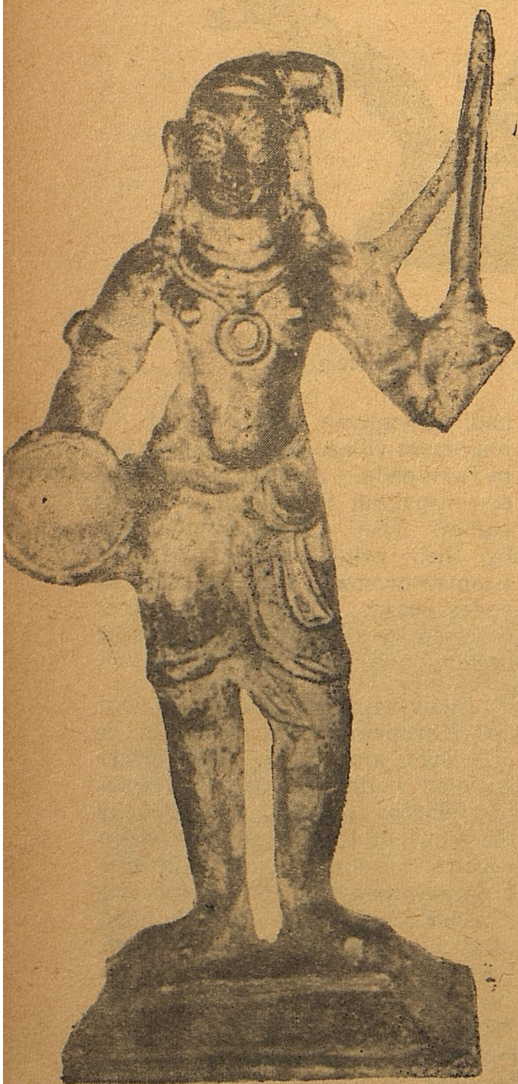
Folk Bronzes are made by villagers and common folks who do not know much about the technical sophi stications and religious canons. So, naturally they are simple in style and workmanship and resemble the styles of the folk terracottas of their period. They have lesser ornaments and represent styles of ordinary masses. They are not made with the usual five metals blend (ஐம்பொன்) the usual metal-blend of classical bronzes. Generally they have been made in " Lost-wax" process. Most of them are bronzes of village deities.

Amman, Ellaikkali of Pidari with her six sisters Kannagi, Ayyanar, Karuppan, Madurai Viran and Muvadiyan are some of the important village deities worshipped in Tamilnadu. Amman is worshipped throughout Tamilnadu in various names. They are represented only by their head portion. So, the Amman bronzes are found only as godess head. The head is either crowned by a conical head-dress or designed with fire flames.

Ellaikkali or Pidari, Ayyanar and Karuppan are guardian deities of villages and towns. The former is called by different names in different places. Often she is called by the name of the village or town in which she has temple as in the case of Samayapurathal of Samayapuram, a village near Trichy. Pechi Amman of Pudukkottai and Ramnad Dists, Vattapparai Amman of Thiruothiyur and Thiru Amathur, Villupuram, Nadi Amman of Pattukottai, Kon Amman of Coimbatore and Veiyali Ukanda Amman of Tirunelveli all belong to Ellaikkali Group. Bronzes for them are made both in standing and sitting poses. They are portrayed with weapons similar

to the classical Kali bronzes. They are represented with two or more hands. In the case of two hand figures one hand holds sula or flower while the other carries a kapala or nose or simply let down.

Karuppan and Madurai Viran are attendants of Ellaikkali ; we have bronzes for Karuppan and Madurai viran. Karuppan has many forms and names such as Sappani Karuppan, Sankili Karuppan and Nondikkaruppan. Bronzes of Karuppan are made in standing pose with two hands. He holds a sickle in one hand while the other hand is either kept on his hip or hangs loosely. Sankili Karuppan holds a chain. The chain may be symbolic of his authority to catch and tie the evil doers for punishment. Madurai viran bronzes are made in standing pose with a pair of hands. He has sword, bow and arrow and dagger or any one or both of them.



Madurai Viran Bronze — Madras Museum

Chola Patronage Perfected Bronze Styles

Murugan and Ayyanar are made both in folk and classical bronzes. Ganesa with his elephant head, paunch stomach and stumpy legs is always a very favourite subject of village artisans. They make stuccos and bronzes for him. Ganesa has four hands. He is represented with all appurtenances that are found in classical bronzes. Ayyanar bronzes are made either in standing or sitting poses. He is also represented in the equestrian pose riding a horse or mounted on an elephant. He has only two hands. Murugan bronzes are made either as Dhandayuthapani, with a mace or as Palaniyandi with a stick. In both forms he is naked except his loin cloth.

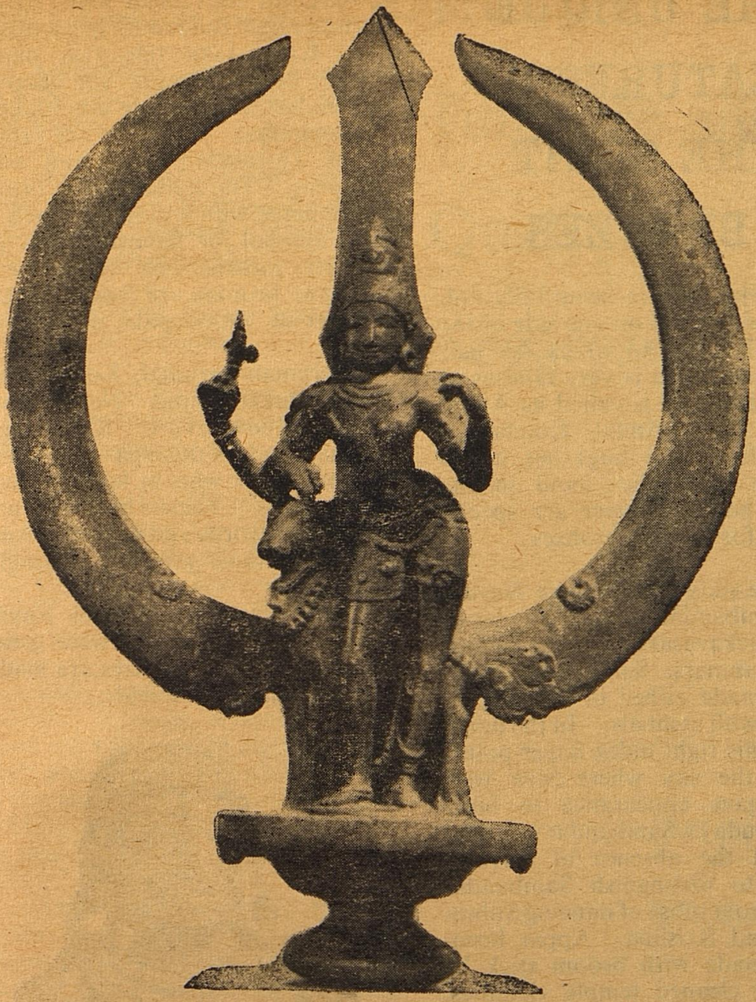
Though Devaram and other Thirumuraikal, do contain references to classical bronzes we have bronzes which could be detable only from 8—9th century A.D. They can be classified into styles such as Pallava, Early Chola, Later Chola, Pre and Post Vijayanagara and Modern. They are classified into these styles and dated on the basis of their ornamentation and styles. The bronzes which have been got with epigraphical evidences and the sculptures of dated monuments help the students of this art to have a standard by which he fixes the dates of bronzes. **Classical Bronzes of Tamilnadu are solid and are made by 'Lost-wax' process.**

The art of bronze making was nurtured by the powerful Devotional Movement started in Tamilnadu about 4th or 5th century A.D. and reached its zenith under the good patronage of imperial Cholas. Agamas teach four paths to salvation to be followed step by step. They are charya pada, Kriya pada, Yoga Pada and Jnana Pada. Of them Kriya Pada gives the details of temple constructions and image makings. Though these portions of Agamas are not equal to the works of Mayamata and Silparatna in technical matters like iconography and iconometry, they reveal theological prescriptions for the bronzes and temple structures.

Bronzes for Siva, Vishnu, their family members and great Baktas and their various forms and incarnations were made by Saivites and vaishnavites. Jains and Buddhists who enjoyed greater influence in Tamil Nadu till the advent of the Bhakti Cult, also made bronzes for their deities. The bronzes collected from Nagapattinam, Tanjore District and kept in the Bronze gallery, Madras Museum, represent the Tamil Nadu Buddhist bronzes. The Gomatisvara bronze obtained from Sravanabelgola and kept in the Prince of Wales Museum, Bombay is a nice example for Chola period Jain Bronzes.

Since the iconography of the above bronzes are almost the same as their counter-parts in other parts of India except some regional influences, iconography description for them is not necessary. But forms of the gods which originally emerged from Tamil Nadu and the bronzes of Alvars and Nayanmars whose

The God Form Bronzes Are a Fusion of Different Arts Into a Dynamic Whole of Eternal Beauty



A Trident with half goddess in Siva Figure.

bronzes can be seen only in Tamilnadu are available in detail.

The skill of ancient Indian Bronze artisan can bear exhibition in any international art gallery by two masterpieces. One is the Saranath or Mathura Buddha of Gupta period and the other is the Nataraja bronze of Chola period. In this bronze different arts fuse together and make us to feel ecstasy through their aesthetic exelences. The lord dances upon a dwarf Muyalagan, personification of evil and ignorance. The matted hair flies like a liberated sprite, but in tune with the dance motions. His head is decorated with flowers such as adukku kondrai, Pulinagak Kondrai and Umattai. Tender vilva leaves and soft egret's feathers adorn. The crescent moon maintains the balanced distribution of these ornaments. The upper right hand sounds the Drum (நாதப் பறை) and in the palm of upper left hand is fire. The lower left hand is in assuring pose and the left is kept like elephant trunk, pointing the raised left foot, the place of eternal bliss. Wrist, forearms and legs are decorated by snakes. The elemental force through which the universe is created maintained and destroyed is designed in this bronze.

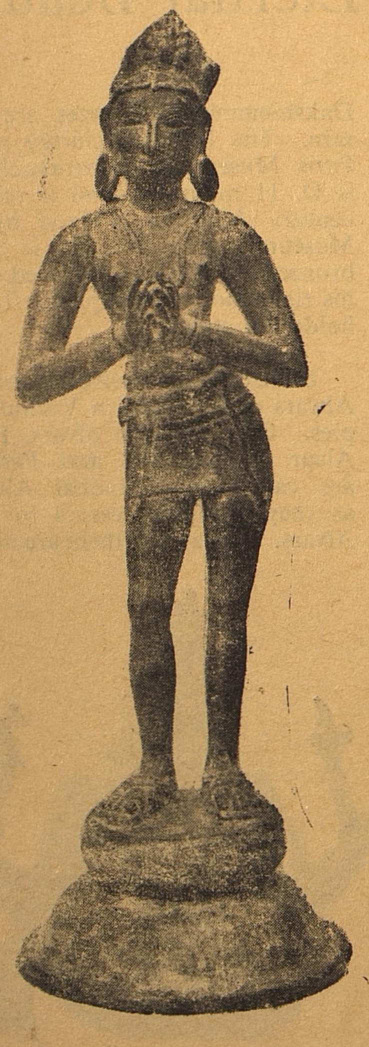
If dancing Nataraja represents kinetic energy and tireless activity, potential energy and tranquility are very aptly designed in the form of Dakshinamurthy, the Gods of South (தென்னுடைய சிவன்). In this form he is depicted as spiritual teacher. He has four hands. The upper right and left hands hold axe and antelope or snake and fire or trident and rosary. The lower left-hand holds palm leaves containing holy seriptures in some bronzes. The right hand is in teaching pose, has index finger touching the thumb, symbolising the union of God and soul. Though we find Dakshinamurthy in stone sculptures in almost all the Siva temples in Tamilnadu, Dakshinamurthy bronzes are very rare. The Dakshinamurthy in the Paris Museum is remarakable. It is O. 11 m in size and is of 16th century A.D. as is fixed by the Museum authorities. It is gilted bronze. Muyalagan is placed under his right foot. The upper left hand holds fire stick.

Bronzes of the twelve Vaishnavite Alwars can be seen in Vishnu temples. Of the twelve alvars, Poikai Alvar Budhadalvar and Perialvar are called as "Mudhal Alvars" as they are predecessors to other Alvars. Bronzes for them are usually

Post -Vijayanagar Period Dakshinamoorthy Bornze at Pudukottai Museum

THE UNIQUE FEATURES OF THE SAINT BRONZES

made in sitting pose, in a group of three. Most of the Alvar and Nayanmar bronzes are made, with folded hands, in worshipping pose. Thirumazhisai Alvar is made in sitting pose in worshipping attitude. A bronze of a chera King, Kulasekara Alvar is also made in worshipping pose with royal dresses and crown. Thirumangai Alwar a Chieftain under Chola king is made in standing pose with sword and shield. Bronzes of Tondaradipodi Alvar and perialvar are made in standing, worshipping attitude with flower baskets as they were used to gather flowers for the lord's Pujai. Thiruppanalvar, as a good musician is depicted with musical instruments such as cymbals, pipe or vina, Nammalwar and Mathurakavi Alvar bronzes are made in sitting, worshipping attitudes. Andal is made in in standing pose bronzes. In a nice feminine pose comprising three-bends of her body, she holds a flower in one hand, while the other hangs down. Her hair is beautifully collected and banded on one side of the head. The style in which the hair band is arranged is very famous in Tamil Nadu and is called as Andal Kondai. This Andal Kondai, a long garland that hugs her up to the knee and the hand in the pose of holding flower are special features for Andal bronzes.



Chola Period Kannappa Nayanar
Govt. Museum, Madras.

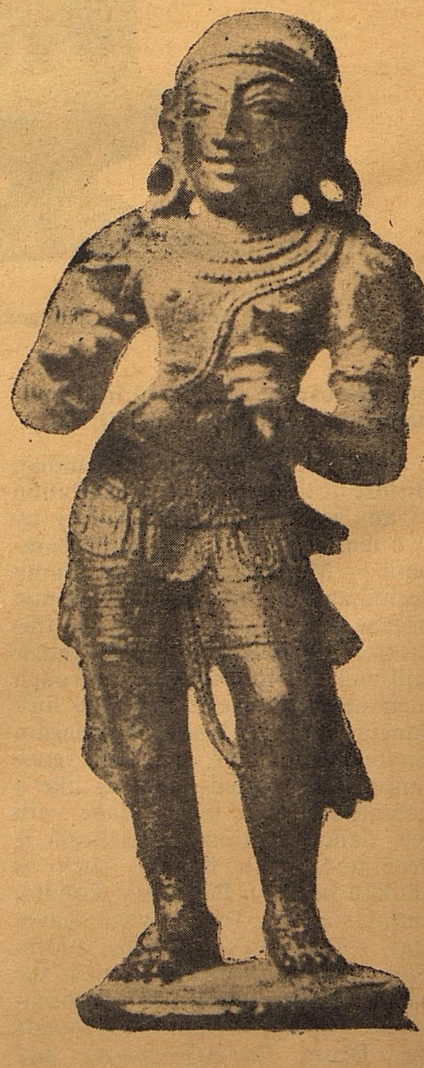
Of the sixty three Saivite Nayanmars, Sambandar, Appar, Sundarar, and Manickavasakar are the famous four Nayanmars, Sambandar bronzes are made either in dancing or standing with cymbals. In the dancing pose his right index finger points towards the sky where Siva with Parvati gave appearance to Sivapada Hirudaya Sambandar's father. This and the absence of Srivatsa help us to distinguish Sambandar bronzes from those of dancing Subramanya and Krishna. Appar bronzes are made with broom stick by which he cleaned temple vicinities. Manicka vasakar is shown with palm leaves containing Thiruvasakam in left hand. His right hand is in teaching pose. Sundarar is made in standing pose sometimes with a stick and some others holding a flower in one hand and resting the other hand upon a thandam.

Chandikesvara is made either in sitting or standing pose with axe. Arivattaya Nayanar is made with a sickle by which he cut paddy Sheaths. Kungaliya Nayanar bronzes are made with incense—burner. Nilakanda Yaipana Nayanar is made with sakotayal. He is described in Periya Puranam as the Master of Sakotayai.

Kannappa Nayanar bronzes are made in standing pose with folded hands. They are in hunter dress. His bronzes have bow quiver with arrows, dagger and sword or any two or three of them. Karaikkal Ammayar images are made either in standing or sitting pose with symbals. As she had got devil's appearance at her request, she is made with canine teeth and her skeletons visible. This often mislead scholars who are not conversant with Saiva Thirumuraigal to identify her wrongly as Kali. Like this two more bronzes of Nayanmars will deceive the scholars if they have not studied Thirumuraigal. They are the bronzes of Thirunalaippovar and and Anayanar. Thirunalaippovar bronzes are made with a plough, which is also a symbol for Balarama, one of the ten incarnations of Vishnu. Anayanar bronzes are made exactly like that of Venugopala, as playing flute.

Cheraman perumal, Kocehenkat Chola, Pukai chola, Nedumarar, Iadikal Kadavarkon, Kayarsinga Nayanar and Narasinga Munairaiyar were kings who in later life became saints. Their bronzes are made with swords and crowns. And they kept their swords in kingly manner.

Enadi Nayanar, Kotpuli Nayanar and Munai Aduvar were great warriors and their bronzes are made with swords and shields.



Later Chola Period
Thirumangai Alwar.

How to Improve the Quality of Sugarcane

AN INTENSIVE RESEARCH IN TAMIL NADU

Sugarcane in Tamil Nadu is planted in different months.

Accordingly the seasons are broadly divided into main season and special season.

Main season consists of the early season (December-January), mid season (February—March) and late season (April—May).

The special season planting is from July to September.

Whatever the season, there are quite a few improved cane varieties you can choose from.

They are Co. 658 and Co. 62174 for early season, Co. 449 and Co. 6304 for mid season and Co. 419 and Co. 853 for late season. For special season select Co. 658 or Co. 853.

Early season (December — January) planting is found to be more ideal for getting highest yields. Pests and diseases will also be lower in this season. In late season (April —May) plantings, pest attack is at its peak.

Among the varieties released so far, Co. 6304 has appealed to the farmers mainly due to its high yields, thickness and non-lodging habit. It is an average sugared variety. Some of the high sugared varieties with good yield to cater to the needs of farmers as well as sugar industry, such as Co-N 68075 (mid. & late), Co. A 71-1 (mid. & late) and Co. C. 6787 (early) are under final test.

Preparing the Land :

Ploughing the land deep with iron mould board plough 4 to 6 times, breaking the clods with junior hoe and levelling with buck scraper were found to be quite paying.

Opening trenches at 20 cms. depth with Victory plough, giving 80 to 90 cms. spacing, is also recommended.

Seeds and Sowing :

Seed material obtained from a well manured sugarcane nursery (sugarcane short crop aged 6 to 8 months), is more healthy and free from pests and diseases. It also germinates well. A hectare of nursery will supply seed cane for planting about ten hectares. Therefore, using short crop seed material is better than setts from sugarcane tops.

Dipping ends of setts in organo mercuric compounds like Aretan (0.25%) and Agallol (0.05%) promotes good germination and controls pine apple disease.

About 45,000 three-budded setts per hectare are required for getting maximum yields.

Manuring :

The following manurial schedule is recommended for the crop.

Apply 25 tonnes of farmyard manure or compost or press mud per hectare and 75 kg. phosphoric acid as superphosphate as basal dose.

As top dressing apply 250 kg of nitrogen per hectare in two split doses on 45th day and 90th day after planting by placement in the form of urea or ammonium sulphate.

Supplement it with 100 kg. of potash per hectare at 45th and 90th day along with nitrogen in the form of muriate of potash.

Ratoon crops are given an extra dose of 100 kg. nitrogen per hectare.

Irrigation :

Give irrigation 5—7 days after planting followed by irrigation once in 7 to 10 days at germination, tillering and growth phase. Irrigate once in 12—15 days at harvest stage.

Digging and turning the soil with a spade 2 to 3 times every month followed by hand hoeing is effective and economical. But instead of spade digging working bullock drawn Junior hoe is more profitable. Application of herbicide, 2, 4-D sodium salt at 3 kg. (*a.i.*) per hectare as pre-emergence spray and the same chemical repeated on 25th day after planting as post-emergence spray also will control the weeds.

Mulching trash in a thing layer of 6 to 8 cms. in between the cane rows, 2 to 3 days after planting, conserves soil moisture, suppresses weed growth and controls early shoot borer. This way you can get an yield of 5—6 tonnes more per hectare.

Partial earthing up on 90th day after planting on completion of second dose of manure and high level final earthing up between 120th to 150th day prevents the crop from lodging.

Trashing in the 5th month helps clean cultivation and eradicates egg masses of pests. Trash twist propping by single line in the 5th month and by double line in the 7th month supports the canes from lodging. This helps check deterioration of juice quality and reduction of cane yield.

The cane crop attains its peak maturity during February—March in Tamil Nadu, irrespective of varieties and the time of planting during the main season. However, the crop is ready for harvest in the 12th month from the time of planting. Ratoons can be harvested one month earlier.

RURAL BANKS TO OFFER FULL MONEY SUPPORT TO FARMERS

LOW INVESTMENT AND LOW OUTPUT PATTERN TO BE BROKEN

The recent decision of the Government of India to set up a chain of Regional Rural Banks constitutes a significant milestone in our quest for a rural credit structure appropriate to the country's needs. The objectives of rural credit policy in this country are familiar enough. In brief, policy has aimed at widening and deepening the institutional coverage of rural credit needs.

Co-operative Credit Structure :

For several years, State policy in this regard laid emphasis on the development of the co-operative credit structure as the major instrument of building up a wide and viable rural credit system. And with State support, progress has been made. In 1951—52 short and medium term co-operative credit was no more than Rs. 24 crores. By 1971—72 the figure had gone up to Rs. 608 crores. This progress, significant as it is, conceals considerable regional unevenness. Even in areas where the co-operatives have had notable success there is reason to believe that the benefits have not extended to all strata of cultivators. In particular, the small the and marginal farmer does not appear to have received his due share. The very fact the Reserve Bank was compelled not so long ago to suggest that co-operatives should aim at providing atleast 20 per cent of their total credit for this class of farmers shows the relative neglect, if one may use a strong expression, of their needs. The figures also support this view. At the end of June, 1973 though primary co-operative societies were supposed to cover 95 per cent of villages the average membership in the 158,000 societies was no more than 253. Even amongst the membership, the proportion of borrowing members to total members was no more than 40 per cent. The reasons for the inadequate performance of co-operatives have been gone into on several occasions among others, by the Reserve Bank whose study of the overdues in the co-operative system pointed to the weaknesses in the structure emanating from the managerial deficiencies and ineffective post credit supervision and loan recovery. Co-operatives have also not been able to mobilise adequate resources as seen in their continuing and large dependence on the Reserve Bank for re-finance.

Commercial Banks

A development of significance in the rural credit field in recent years has been the increasing participation of commercial banks in providing agricultural credit. This has been largely a post-nationalisation development and from a figure of Rs. 54 crores in June, 1969, commercial bank direct credit to agriculture had risen to Rs. 540 crores in December, 1974. This is, by any reckoning, a significant achievement but it is a chastening thought that this figure still represents no more than 6 per cent of total commercial bank credit. It shows the magnitude of the job yet to be done. The main instrument to bring about an expanding role of commercial bank credit to agriculture has been the branch expansion in the rural areas. In fact, about half of the total number of bank branches opened since 1969 have been in the rural areas. Even as in the case of co-operatives, there are considerable regional disparities in commercial banks' rural credit operations. A large part of the credit has gone only to a few areas. Several parts of the country remain underbanked and underfinanced.

The Big Gap :

Altogether, the share of institutional credit today is estimated at somewhat over a third of total rural credit needs. This indicates the very large gap that remains. The gap has assumed added significance now both in view of the quantitative increase in credit demand, and, perhaps, more importantly, in the light of the profound qualitative change in the character of that demand that has followed the effort at modernisation of agriculture and inducting into it the new technology. Agriculture has now shown its demonstrable capacity to break out of the vicious circle of low output and low investment. The new technology is the key to this process. The modern techniques which are centred around assured water and wider application of fertiliser and increased adoption of high yielding seeds — all call for more financial support. If the State has provided the infrastructural facilities by extending irrigation and power. if adequate fertiliser is available and better seeds are waiting to to be applied, it would be unfortunate if the farmer were unable to take advantage of this because he lacks finance as it is finance which could translate the translate the input technology into additional production. In other words, what is physically possible, technically feasible and economically viable should not falter because finance is not available.

An important aspect of the new technology is that it is, by and large, divisible and this divisibility helps even the small farmer to adopt the new techniques. Yet the small farmer needs to be persuaded to adopt the new methods and financed to do so. In fact, it is only the adoption of the new techniques that could make for viability and efficiency of his operations. It is this class of farmers that is numerically the largest and together with landless labour and the petty artisan constitutes a significant proportion of the rural poor and it is to his needs that special attention needs to be paid.

A legitimate question could be raised as to whether a restructuring or refashioning of the existing credit institutions would not enable us to achieve the objects we have in mind. More specifically, if we are in a position to identify the weaknesses of the co-operative system whether organisational, managerial or financial could we not think in terms of improving them ? Attention certainly has been given to this

aspect of the matter. The major problem is to strengthen the co-operative credit system at the base level and to universalise its membership. It is for this purpose that Government have taken the decision that Farmers Service Societies should be set up at the base level of the rural credit structure. This is a process which in its very nature will take time. Meanwhile, there is urgent need for filling the credit gap.

Similarly, the limitations of the commercial banking system in extending its rural credit coverage stem from the high cost of its operations and the attitudinal problems that arise from its basic urban orientation. The high cost of operations, in turn, reflects the salary structure, staffing pattern and high establishment costs. Commercial banks have found, wedded as they are to their present procedures and systems, that servicing rural business is expensive and many rural branches uneconomic. Most of the rural branches of the commercial banks are today what are called deposit centres, in other words, branches whose credit deposit ratios are well below the national average. Consequently, the commercial banking system has effectively, though perhaps not intentionally, become an instrument of transmission of funds from the weaker rural aras to the more affluent urban sectors. This trend must be reversed and it is essential that, given the credit needs in the rural areas, the first step should be to see that the funds mobilised there are also deployed there. The question of reducing banking costs has been considered several times. There have been proposals such as having a separate rural cadre of bank staff and the like but these have not succeeded. The attitudinal aspect is no less important. If commercial banks are to make an effective thrust in rural banking, their systems and procedures, training and orientation have to be adapted to the rural environment. With the institutional set up of banks today, this is not likely to be either a quick or easy process.

Rural Banking

We therefore need an institution which would combine the rural touch and local feel, a familiarity with rural problems and attitudinal identification with the rural economy which the co-operative possess in large degree, with the modern business organisation, commercial discipline, ability to mobilise resources and access to the central money markets which the commercial banks have — in other words an institution which is locally based, rurally oriented and commercially organised. This is the rationale for the regional rural bank.

The role of the new institution as presently envisaged is that it should supplement and not replace the other institutional agencies in the field. Integral to the idea of the rural bank is that it should have a two-way relationship both with the commercial banks on the one hand and a strengthened primary level society such as the Farmers Service Societies on the other. The rural banks would thus be in a position to draw on the sponsoring commercial bank for resources and also at least in the initial stages, for some organisational support while their lending activities would, to the extent possible, be through the Farmers Service Societies.

Coordination :

One of the important aspects, during the actual operation of the bank, would be to bring about coordination between the various credit agencies now in the field. It would clearly be wasteful if the various credit agencies were to cut into each others' operations. Overlapping of functions is a luxury which we cannot afford and mechanisms would need to be devised to ensure proper coordination.

The share capital of the rural bank is to be subscribed by the Government of India, the State Government and a sponsor bank which would be a public sector bank in the ratio of 50 per cent, 15 per cent and 35 per cent respectively. The association of the State Government would ensure continuing coordination with the State agencies concerned with rural developmental activities while the association of the sponsor bank would provide the linkage to the wider commercial banking network.

Operational Cost :

The other aspect of the bank's working is to keep a strict control on their cost of operations. It is now proposed that the salary structure of the employees of the regional banks should be based on the scales prevailing in the relative State Governments. This will, at one stroke, make their salary bill much less than that of commercial banks today. At the same time it would be necessary to keep down other costs as well and to pattern the organisational hierarchy, behaviourial pattern, business procedures and systems of the rural banks not in the image of the commercial banks as they are now organised but on a basis more appropriate to their functioning. In a word the culture of the rural banks has to be distinct and different.

Staff Pattern :

This leads me on to the question of the personnel of the banks. If the banks have to cater to the rural population, understand their problems and have an affinity with the areas they seek to solve, it is essential that they draw their staff from those with a rural background and orientation. The staff will also need to be specially trained and the training programmes, particularly of the executives of the rural banks would need to be devised with a great deal of care and attention so that the object of the exercise is fully reflected in the attitudes of the personnel.

An important question that is under consideration is the location of these banks. It is proposed that the banks should be set up in areas which are comparatively backward and where the coverage at present by the commercial and co-operative banks is relatively poor. They should also be areas which have potential for development and which can effectively absorb productive credit. At the same time,the special features of States in the North-East and States like Jammu and Kashmir will also have to be taken into account.

These are all organisational aspects which currently are under examination and on which decisions may be expected soon. A Steering Committee is at present engaged in this task and it is the endeavour to set up 15 banks by October 2, 1975 and in any event, by the end of the year. Over a phased programme extending upto April, 1977, it is hoped to set up, subject to the constraints of manpower, as many as 50 banks.

—*Courtesy* : A.I.R.

By
THIRU. M. NARASIMHAN,
Addl. Secretary,
Finance Dept., Govt. of India.

GRAPE DISEASES IN THE SOUTH

Grape growers in the south faced with quite a few diseases. Some of them are quite damaging reducing the yields and doing permanent damage to the vineyards. Downy mildew, anthracnose, powdery mildew and rust are the Blue most destructive diseases in the south. Anab-e-shahi, Thompson Seedless, Fakdi, Bhokri, Selection-7 and Kali Sahebi are highly susceptible to the first three diseases. Rust is confined to Bangalore commercially grown in the South.

Here are the symptoms of the diseases and their control.

MAJOR DISEASES

Downy Mildew :

This disease appears on leaves, flowers and fruits. In the initial stage, yellow oily spots appear first on the leaves and later on, on the under-surface of the leaves, a downy growth of the fungas appears. The fungus spreads rapidly in cool, moist weather.

With the dry weather, the spots turn brown and the affected leaves shrivel. As a result the leaves drop. In severe cases the vine may even be completely defoliated.

The shoots and tendrils are attacked early in the season and they become stunted. Affected fruits show large, oily blotches with a dark margin. They then wither and fall easily.

Control :

Infection can be reduced if all prunings, fallen leaves and inefcted fruits are burnt or buried well.

Trials conducted at the Indian Institute of Horticultural Research have shown that the disease is effectively controlled by giving about eight prophylactic sprays with any one of the copper fungicides (Bordeaux 1%), Blud Copper (0.5%), Fycol 8E (1.0%), Kocide (0.2%), Blitox (0.5%). Start spraying when the shoots are 15 to 20 cm. long. This gives a good coverage of the fungicide on the foliage. Additional sprays are usually necessary under prolonged moist weather conditions. Avoid spraying when the grapes are in flower and also when the berries ripe.

Anthracnose :

Anthracnose is a serious disease and attacks all young parts of the vine, especially new shoots and fruits. On leaves infection appears first as small and very dark brown spots. Later the spots grow in size. Distortion is common if there are many spots. The most serious symptoms are observed on the shoots. On the stem and young shoots irregular black spots develop.

If fruit stalks are attacked, the fruits usually do not develop. The affected youngberries develop sunken spot known as ' bird's eye spot.'

Control :

Prune diseased canes and burn of bury prunings, fallen leaves and diseased fruits. Complete control of the disease has been achieved at the Indian Institute of Horticultural Research by spraying the crop three to four times with Defoliatian (0.3 per cent).

Powdery Mildew :

The powdery mildew affects the leaves, stems, flowers and fruits and is by far the most destructive.

In severe cases the canes do not mature and fail to give good bunches after pruning for fruits.

rape berries affected by this disease in the initial stage, show a powdery fungal growth which leaves a scar on the berries. In severe cases of attack the berries crack thereby greatly affecting the market value and yield of the crop. The disease occurs more during the drier months when warm sultry conditions prevail. Thorough dusting or spraying the foliage, canes and fruits with sulphur helps in checking the disease. When the fully grown berries are attacked it is necessary to dip the bunches in wettable sulphur (0.2%).

Rust :

Rust appears usually during the colder months (October—February). The fungus produces numerous orange coloured sori on the lower surface of leaves. In severe cases of infection the entire leaf surface is covered by sori resulting in defoliation.

Control :

Sulphur dusting or spraying keeps the disease under control.

Black rot :

The fruits are usually infected. The symptoms are usually observed when the berries are half ripe as circular spots. The infected berries shrivel and dry. The pathogen is active during hot, moist weather.

Control :

Spray with any one of the copper fungicides suggested against downy mildew.

Fruit rot :

Grey mould or Botryis rot : In the initial stages, small circular, less defined spots appear on the berries. When rubbed, the skin under these spots slips from the berry exposing the pulp. Later, the berries shrivel, crack and rot.

Control :

Fungicidal dips with captan 0.2 per cent or dithane Z-78 (0.2 per cent) are found to be effective in checking the infection. However, fungicidal treatments should be discontinued before harvest.

Brown leaf spot :

The pathogen produces numerous dark brown spots on the leaves and shoots. In severe cases of infection defoliation is common and young shoots dry up.

Control :

Various copper fungicides recommended for the control of the downy mildew disease are also effective against this disease.

Damping off :

The collapse and death of young seedlings is sometimes observed in seed pans. Soil borne fungi have been found to be regularly associated and can cause damping off seedlings. The disease is particularly severe under water-logged conditions.

Control :

Drenching the soil with Bordeaux mixture (1 per cent) or Brassocol (0.2 per cent) 16 is considered useful in reducing the disease incidence. Improved cultural practices go a long way in controlling this disorder.

T. S. SRIDHAR and H. S. SOHI.
Indian Institute of Horticultural Research,
BANGALORE.

Dr. Mu. Varadarajanar

HIS CONTRIBUTION TO EDUCATION AND TAMIL CULTURE

Dr. Mu. Varadarajan is well known to the World as a great writer in Tamil. He has enriched Tamil in every sphere.

He was my revered Guru who had shaped many of us as ardent students of Tamilology. Two decades ago, I had the opportunity of sitting at his feet to learn Tamil, not only Tamil language and literature but also the salient features of Tamil Culture. We the students of Dr. Mu. Va. admired him as a savant of Tamil scholarship and an embodiment of Tamil culture who used to inculcate in us the great ideals of ancient Tamils and who at the same time never failed to infuse new ideas to the traditional scholarship for the realisation of a better new world order !

His was the clarion call for the Renaissance of Tamil Literature in our country. His pleasing manners, polished behaviour and polite attitude have endeared him to many. He was a friend philosopher, and guide not only to his students and friends, but also to his numerous admirers and avid readers.

We, the students of Tamil used to admire him and also have attempted to follow the foot-steps of this revered Professor in all walks of life. There is an old saying about Tiruvalluvar,

‘ He is the Poet !
He is the Scholar !
He is the Savant of Tamil !’

Dr. Mu. Va. answered this description more aptly than any one of the innumerable literary luminaries of this century.

By

Prof. K. D. Thirunavukkarasu,

International Institute of Tamil Studies, Adyar, Madras-6000 20

We are all well aware of the fact that he had devoted his time and energy to enhance the status of Tamil and the Tamils. Once he quoted a line addressed by a Sangam Poet to his patron as ‘என் நெஞ்சம் திறப்போர் நிற்காண்குவரே’ i.e., ‘ This who can open my heart can see you there ! ’ and with a slight alteration of a single word, our Professor expressed: என் நெஞ்சம் திறப்போர் தமிழைக் காண்குவரே’ i.e. ‘Those who can open my heart can find Tamil ! ’ which includes the human factor as well !

Prof. K. D. Thirunavukkarasu
recepient of Sahitya Academy Award for his Thirukkural Studies.

He never claimed himself as a great educationist. But his views on education have given a new form and shape to good old ideals of education. First, we must not forget that he was a traditional scholar in Tamil with radical views. He was never the guardian of conservatism. He was a living refutation of Anna’s scathing attack on Tamil Pandits delivered in 1948. Referring to the Pandits of that era Anna had said ‘பழமைப் பாசறையின் காவலர்களே தமிழ்ப் பண்டிதர்கள்’ i.e. ‘Tamil Pandits are but the custodians of conservatism.’ Dr.Mu.Va. strived his best to regenerate and rejuvenate the teachers of Tamil to become the torch bearers of traditional wisdom with modern outlook.

Dr. Mu. Va.’s views on education are very simple, dynamic and at the same time pragmatic. He believed that “ education should give its benefits either directly or indirectly to humanity.” He wanted to implement radical changes to the benefit of student community. He observes that “ Education should serve as a means for earning the daily bread of man as well as it must induce him to develop his personality. Every educational institution should always have as its aim that the young man leave it as a harmonious personality. The development of general ability for independent thinking and judgment should always be placed foremost, not the acquisition of special knowledge. It is essential that the student acquire an understanding of and a lively feeling for values.”

To achieve these goals, he preferred the medium of mother tongue which would serve as an effective instrument and avoid the colossal waste of time and energy of our people.

As Professor of Tamil language and literature, Dr. Mu. Va. made earnest attempts to propagate the ideas and ideals embedded in ancient Tamil classics among the mass which were actually sealed books to the common man. He gave new orientation to the study of Sangam classics through his writings such as “ *Virunthus* and *Celvam* ” He unfolded new vistas for the study of Tamil. He was responsible for the introduction of B.O.L. (Hons) Degree course in Tamil Nadu. When (the then) Madras Public Service Commission declined to recognise the B.O.L. (Hons)

THE EARLIEST PROPONENT OF CONTINUING EDUCATION

HAD A SOFT CORNER FOR PRIVATE STUDY CANDIDATES

Degree holders on par with other Hons. Degree holders, Dr. Mu. Va. spared no pains to take necessary steps to make the concerned authorities to realise the problem and for a quick solution for it. Because of his strenuous efforts, the University of Madras announced that B.O.L. (Hons.) Degree is on par with other Honours Degrees, allowed the , B.O.L. (Hons.) Degree Holders to convert that Degree into M.A. and introduced a B.A. (Hons.) Degree Course for Tamil in its curriculumn.

He was the earliest propenent of and encouraged the method of "continuing education" through private study. **He had a soft corner for the candidates who appear privately for the examinations. This sympathy for the private study induced him to introduce correspondence course at Madurai University.** He expressed great delight at the success of his experiments in implementing the correspondence courses. He said that he had received encouragement from all quarters of our country as well as all strata of our society for introducing correspondence course even at the Post-graduate level.

In the sphere of higher education, especially in the field of research he favoured comparative study. When he was the Professor of Tamil at the University of Madras, I had the opportunity to serve under him as a lecturer in Tirukkural research department established at Madras University; he advised me to make a comparative study of Tirukkural with other great didactic works of the Classical languages of the world. I tried my best to fulfil his ambitious plan as best as I could though I could not claim to be a well-equipped scholar for this task. Now that the work has earned for me the Sahitya Akademi prize, the demise of the person who inspired me to undertake the work, some weeks before this announcement, leaves me all the more depressed. Perhaps he would have goaded and guilded me into more such rewarding endeavours. !

Tamil Culture

If I say that Dr. Mu. Va. was the embodiment of Tamil culture, I believe that nobody can dispute this statement. He believed that "cultural development of a nation depends on a balance of body, mind and spirit in its people, measured on a scale only less human than divine. To survive, we must keep this balance. To progress we must improve it." With these basic views on culture, we can trace his contribution to Tamil culture.

ADVOCATED THE GOLDEN MEAN IN PURSUIT OF PLEASURES

He very often excoriated the Tamils that they have no real love either for their language or for their fellow beings, though their social behaviour with aliens is always free and frank.

This clearly brings out that he was anxious to eradicate from the Tamil society these basic evils that hampered their progress in all walks of life. The supreme expression of the Tamilian wordly ideal is the portrait of Canror. (சான்றோர்) This term visualises the 'Perfect Man.' Those who are perfect in learning and moral conduct are known as *Canror*. They are noble in thought, speech and action. This was the cherished ideal fo the ancient Tamils. We can cite a number of references such as,

"My magnificent duty as Mother
is to bringforth and to bring up
To make perfect man (*Canron*) is
the father's duty"
(Puram: 312)

"The mother who hears her son being called '*Canron*' will rejoice more than she did at his birth." (Tirukkural 69)

He contributed his mite for shaping a new world in which the individuality of each and every man should be safeguarded. He came to the rescue of modern Tamil society with a philosophy of life that is neither otherworldly, nor fatalistic in its approach but practical in the true sense of the term. His philosophy of life laid stress on socialism, but it is universal in its outlook and pragmatic in its approach. He never failed to remind us of the higher values of human life and thus inculcated the ideal of golden mean in the pursuit of pleasures i.e., 'Nothing too much' is the watchword (slogan) of his philosophy of life "எதிலும் நன்மை, தீமை உண்டு. அளவோடு எதையும் பயன்படுத்த வேண்டும். அளவு மீறினால் எதுவும் தீமையே"

Dr. Mu. Va. started his life as an assistant, and a school master, then he gradually rose to the highest level of a Vice-Chancellor. In his writings, one can trace the course of his mental development which reached its acme in the fifties itself.

Poet Bharathi AND October Revolution

Many a literary critic has preferred to name Shelley as "the child of the French Revolution." Likewise, Subramanya Bharathi, the great national poet of Tamilnadu, can also be justifiably called the "child of the Russian Revolution of 1905". Bharathi himself came to the limelight of patriotic poetry and political journalism in those turbulent years of militant Indian nationalism which followed in the wake of the Russian Revolution of 1905. This revolution opened the floodgates of national liberation struggles of the countries of the East, including India.

Poet Bharathi who was in his prime of youth at that time adopted Tilak as his political leader and turned himself into a bard of the awakened nation. He resigned his job as sub-editor in the moderate newspaper SWADESAMITRAN, and started a progressive journal of his own.

Undaunted

Bharathi's political weekly *India* published from Madras under the motto of "Liberty, Equality and Fraternity" began emitting fire and fury against the alien rulers and their exploitation, that brought it soon to the notice of the British government. Bharathi, who got secret information about his impending arrest, decided to move with his associates into Pondicherry which was then under the French rule and to continue publication of his journal from there. Tirumal Acharya, his colleague and publisher of *India* who accompanied him to Pondicherry, went abroad from there, to join the Indian revolutionaries in Europe. It is no wonder that this young man was one among those who founded the Indian Communist Party in Tashkent.

Bharathi was compelled to live as a political emigrant in Pondicherry for nearly a decade. But the iron hand of the British fell upon the journal soon and it was banned in Tamilnadu. Undaunted, Bharathi began to voice his opinions through other journals.

It should be noted here that Bharathi was one among the few in those days who had developed an international and revolutionary outlook and believed that only along with economic and social emancipation, political freedom could become meaningful and complete.

Reverence

As a keen observer of the developments in Russia, Bharati wrote an article soon after February Revolution of 1917 in which he said that the "Russian political revolution is a good omen to the golden age of mankind which is fast approaching." When the October Socialist Revolution succeeded, he was the first Indian poet to hail that Revolution in his magnificant poem "New Russia."

He has called the October Revolution "Yuga Puratchi" meaning "the revolution which had ushered in a new era, had brought about a new historical period of world importance."

In an article on "wealth" written shortly after the October Revolution of 1917, Bharathi begins it with the sentence, "it seems that the socialists in Russia could almost achieve their ends" and goes on to explain what socialism is. "The socialist doctrine, he continued, "is gaining more and more strength. In the Republic of Russia, established under the leadership of 'Sriman Lenin'."

Bharathi held Lenin in high esteem and always mentioned him with the Tamil reverential epithet of "Sriman." All the arable lands and other riches of the country have become the common property of all the people....This doctrine has transcended from Russia into Asia too." He expressed the confidence that "only after this doctrine gains complete victory all over the world and becomes the normal way of life, the mankind will achieve real civilization."

Evidence

When the Civil War broke out in Russia and the young Republic was threatened by the armed intervention of so many foreign powers, Bharathi was much disturbed, and had spent many sleepless nights. In a skit named "The Devils" which tells about the bloody atrocities committed by the counter-revolutionary brigades and the foreign interventionalists in Russia, he wrote: "I wanted to forget all about that and to go to sleep, but I could not sleep. I could not forget that. Then the thought of Lenin came to my mind. A mortar gets hit from only one side. A drum gets beating from both the sides. But ah! Lenin is being attacked from a million sides!"

It can be said that Bharathi had closely followed the events which were happening in Russian after the Revolution and had supported many of the reforms carried out there under the leadership of Lenin. At the same time, he had never failed to repudiate and expose the vile and false propaganda of the Western press, directed against the young Republic and its radical measures. Many of his articles stand evidence to this. For example, one of his articles "on the marriage laws of New Russia" he wrote: "When the Bolsheviks came to power persons, who were throwing mud over them, slandered that the Bolsheviks have even made women a common property. But even a clever liar will stand exposed in a few days! How could anyone go on telling lies for ever about a mighty nation?"

By

T. M. C. Raghunathan

TANSITTING PRETTY!

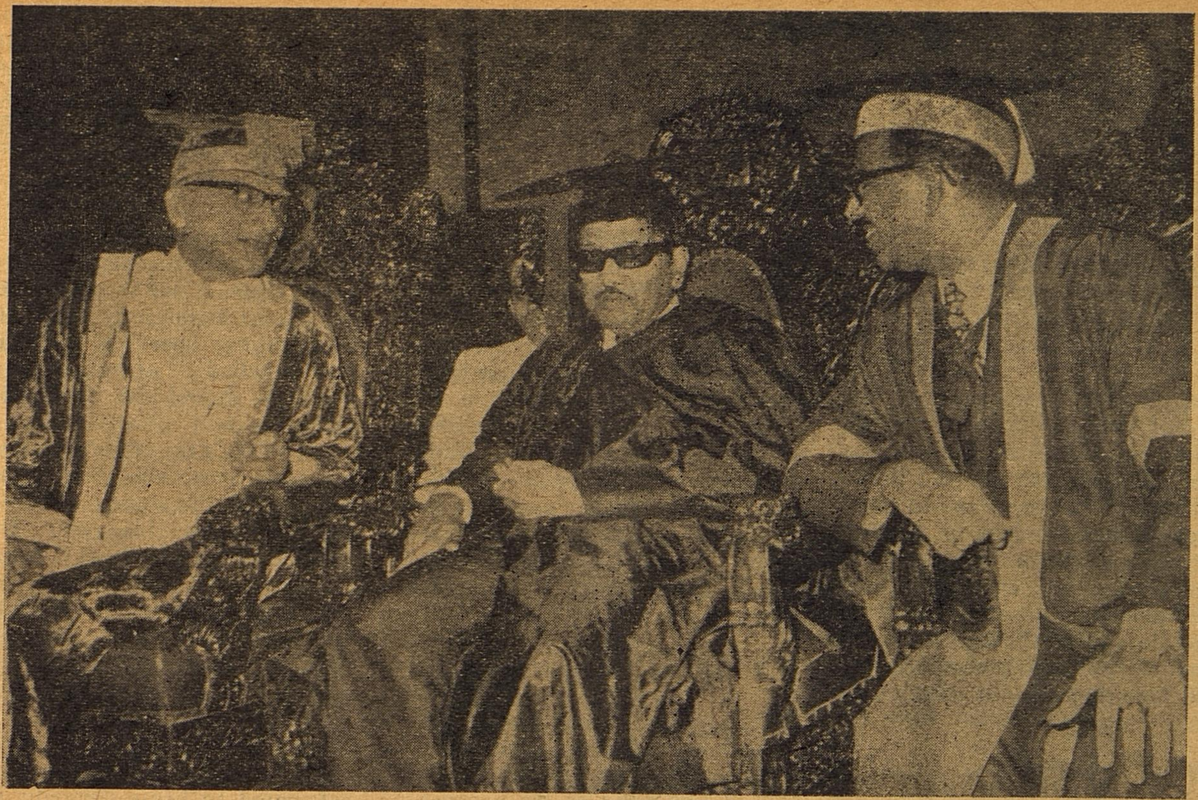
Sitting pretty with TANSI.
Quality and pretty-pretty.
Steel and Wooden
Furniture. Leather goods
and leather footwear.
Just two from TANSI.

A score and more for
various utilities. You can
rest assured, sometime
some place you have
known TANSI.

TANSI

TAMIL NADU SMALL INDUSTRIES CORPORATION LIMITED,

26, Whites Road,
Madras-600014



TAMIL AS PRIMA DONNA

KEY NOTE OF CONVOCATION ADDRESS

It gives me great pride to have this opportunity to convey my greetings and felicitations to a senior University at a point of time when it is preparing to function with the vigour and briskness of youthfulness ; and I am immensely pleased to meet the new Graduates who are the rays of knowledge emanating from this Centre of Learning.

The entire world knows that the Madras University is the place where the priceless treasures that are the thoughts and ideas of intellectual stalwarts took shape and grew up in splendour. There is a history for this University and that history has a greatness. All good hearts are enormously gladdened to view the grandeur of the march of the University, laden with garlands of renown proffered by regions many. Marking a turning point in the page of this history, the Convocation Address today is being delivered in Tamil.

Oh, do see the distress on account of the degree of astonishment in which the annoncement has to be made that the mother-tongue it is which is the language of the Convocation Address ! It is not as if I can read out the Convocation Address only in Tamil. I could read it out in English too, although I might not be able to speak extemporaneously in that language. What is required now, however, is not personal explanation. *The point I am seeking to stress is that if we oursevles hesitate to enthrone Tamil, which is a rich and fertile language native to our soil, then would not our attitude be the equivalent of disregarding and heaping humiliation on one's own mother* ? That is why I pay obeisance to my Tamil and proceed to inaugurate this turning-point festival.

First Place For Tamil

It is said that even more than 2000 or 3000 years ago—in that ancient age when the people in many regions of the globe were conversing with one another only through gestures and wordless howlings—our sweet Tamil was a language that could boast of a highly-evolved Grammar. Any number of examples could be cited in support of this contention. Such is the extent of perfection of our sweet language ; and the yearning of all those who have Tamil at heart is that Tamil should be accorded pride of place everywhere on the Tamil soil. We are striving to fulfil that desire speedily ; and I invite you, the new Graduates, to participate in that exciting endeavour.

Hapless time was when to speak and write in Tamil was considered *infra dig.* In those days it was thought to be an honour only to display proficiency in an alien language. It would not be wrong to interpret that what that Poet of Resurgence, Bharatidasan said :

> " *The jack-fruit that has ripened*
> *on the root itself*
> *is left in the agony*
> *of callous neglect, alas* !,"

was in reference not merely to the misery of young widows but could be taken to apply with equal force to the lot of Tamil too. To argue that Tamil lacks the means to relay and relate the wonders of Science in a world where the frontiers of knowledge are ever-expanding, could only be characterised as a ruse to slip out of the duty to Tamil work for the development of the people and the Tamil language !

Regard For Mother

When Subramania Bharati thundered,

> " *Spread out to the directions eight*
> *and return*
> *with all the treasures of Art* !, "

what indeed was the category of treasures he referred to ? Was it solid gold or diamonds or rubies or pearls ? No, what that Poet with the defiant turban had in mind was the effort to import in Tamil the everlasting treasure of the light of knowledge which could put to instant flight all the silver and gold and gems precious !

Only because there happen to be those who climb on the mother's shoulders so as to fetch fruit from the branches of the tree for the sweetheart, the atrocity occurs here, of Tamil being trampled upon for the purpose of reaching up to an alien language. A second language is no doubt necessary as a means or medium to communicate with the outside world ; and there is certainly no harm in English playing that role. For that, however, to forget even thinking in the mother-tongue —is it not a monstrous injustice ?

What should be pondered is that if a Grammar could be evolved more than 3000 years ago, how rich and fertile indeed the language should have become, even prior to that stage in time ? Tamil was born and it grew up during the preceding many centuries ; and is it not from this that we are able to glean the glory of the Tamils ?

The Classics proclaim that the monarchs of the *Sangam* Age did not merely patronise outstanding Educationists and Poets but actually administered the affairs of the State on the sage advice of those intellectuals. The anthology *Puranaanooru* describes how a certain ruler looked after his subjects, just as a tiger would tend its cub. Another King of the same era, Pandya Nedunchezhian, wrote a poem—which is also to be found in *Puranaanooru*— by way of impressing on the minds of his people the importance of acquiring knowledge through Education :

> " *The good that flows from Learning*
> *is of such merit indeed*
> *that one should extend any aid*
> *or even part with much wealth*
> *and unmindful of the expense,*
> *pursue the path of knowledge.*
> *A mother to whom the children*
> *are equal in all aspects*
> *would herself be charmed more*
> *by the offspring accomplished ;*
> *and even the monarch of the land*
> *would overlook seniority*
> *when he seeks the guidance*
> *of one who is bright and*
> *learned* "

This would go to show the devotion which the Tamil community of those times had towards learning.

Are we not amazed when we go through the details in our classics as to how the Government should conduct itself ! The code for Government was drafted, not a mere 200 or 300 years back, but more than 2000 or 3000 years ago, as we could see for ourselves in the literary works belonging to the *Sangam* Age. However powerful a monarch might be, in terms of Armed Forces, his rule was based only on *aram* or dharma. The ruler of those times took care not to show any favouritism ; on the other hand, he was scrupulously impartial, treating even his own relatives on a par with other citizens.

Dr. Anna On Ideals

The moment I mention about ideals what comes to my mind is the Convocation Address delivered by the then Chief Minister Dr. Anna at the Graduation Ceremony of the Madurai University in the year 1967. I am quoting a few lines from that address as they are eminently relevant to the present occasion :

" The ideals before us are those that we could realise through hard work alone. But in the same row are placed attractively made-up and intoxicating speeches, which are also labelled ' objectives '. The position should be analysed and assessed in a clear manner. We want unity in the country—this is an objective, acceptable to all ; and it is the duty of the student-fraternity to strive towards this goal. No-one with intelligence would acquiesce in the theory that, for the sake of the country's unity, he should consent to the destruction of his language and traditions and accept the domination of an alien language. Everyone with self-respect has got to oppose this. To describe such perverse thinking as ideal or plan is calculated to bring discredit to the very structure of the term ' ideal '.

" ' The common wealth of the country should grow ; and we should work for that '—this is an ideal that deserves to be accepted by all. On the contrary to say, ' Let the wealth of the country grow ; and do not bother even if it were to be concentrated in the hands of five or six individuals '—this would not be an ideal but making a mockery of the same.

" ' To come together and live in cooperation would yield innumerable benefits '—this is a sweet and simple ideal. To evolve a scheme for cooperation on the basis that each one would keep what he has to himself, would certainly not come under the tenets of real cooperation.

" We have to tell the seekers after ' unity ' that they should not conduct themselves in the manner of the wolf which devoured the lamb and proceeded to claim, ' The lamb has now merged in me and from now onwards we two shall be as two brothers ! "

If only we have a clear grasp of the precious pronouncement made by Dr. Anna, would there be the slightest room for any confusion in regard to ideals ?

In case those outside come forward to extent appropriate help to the students receiving education and training in College, the anxiety of many of the youths regarding job-opportunity would vanish. Arrangements are in vogue in many countries, under which big Industrial Houses, in proportion to their own requirements, provide for education and training to students and also undertake to bear the expenses of apprenticeship. In our country, however, the Industrial Houses spend very little on this account. Apart from sharing the responsibility for providing to the students technical education and Science education and the training programmes associated with the same, the Industrial Houses should also come forward to bear a part of the expenditure involved. Such a method would afford a definite opportunity for students to go through their period of learning with hope and confidence in the future.

Remodel System

Discarding old methods, the system of Education should not only be remodelled to suit scientific knowledge and the requirements of the human society, but also an environment would have to be brought about in which there is a positive link between that Education and day-to-day life. I would like to point out here what the Kothari Commission has said in regard to the importance of Science :

"Science has radically transformed man's material environment. In the technologically advanced countries the average span of human life has increased by more than a third over the last hundred years. Science *is* universal and so *can* be its benefits. Its material benefits are immense and far-reaching—industrialisation of agriculture and release of nuclear energy, to mention two examples—but even more profound is its contribution to culture. Science is liberating and enriching of the mind and enlarging of the human spirit. Its fundamental characteristic has turned out to be the possibility of unlimited growth Every advance in Science deepens our understanding of Nature. But it also heightens the sense of ignorance. *Nature is inexhaustibly knowable.* Nothing comparable to the scientific revolution in its impact on man's development and outlook has happened since the Neolithic times.

MORE UNIVERSITIES WILL BE OPENED UP TO LESSEN THE ADMINISTRATIVE BURDEN

During recent years, the number of Colleges has gone up, as also the number of students ; and it is necessary that the standard of Education too is rendered appropriate to this quantitative increase. Not only that a perspective Educational plan would have to be drawn up now itself, keeping in view the expanding population. The scheme to confer Autonomy on Colleges with a view to improving the quality of Education has also been accepted in principle. It would help to step up the potentialities of Colleges, if they were to function autonomously under the supervisory control of the Universities. Colleges that have the requisite qualification for this are to receive the benefit of Autonomy in the near future.

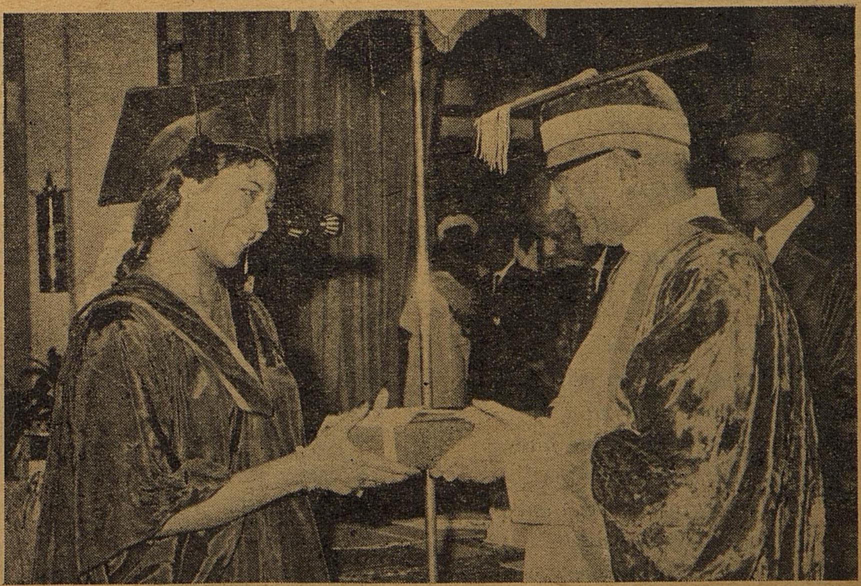
For reasons of administrative facility in view of the increase in the number of Colleges and so as to bestow special attention on the Colleges, we are earnestly attempting to establish two more Universities, one in Tiruchirappalli and the other in Madurai, and also to set up in Madras a separate University for Science and Technical Education.

You are seeing how, in the assurance that steady and sustained support of Graduates such as yourselves would be available in ample measure, the Government, the Universities and those in the field of Education are formulating schemes so as to ensure that the students of the present are able to pursue their studies in security and self-confidence and so that their future may be filled with radiance.

Towards The Future

Just as Shivaji's mother Jija Bai made her son a redoubtable warrior, the teaching fraternity should concentrate attention in order to enable students to grow up into citizens of prowess. In tune with the maxim that it is the duty of the father to equip the son to become a man of grace and nobility, the preceptors should take the place of the father and train the students accordingly.

There is countrywide talk of discipline today. That order and discipline are very, very necessary for the younger generation and that duty-consciousness and dignity should be safeguarded from erosion have been continuously emphasised by men of light and leading. Rather than cultivate the feeling that law alone could keep them in check, the youths should, if their own accord, come into a self-discipline which would have as much sanction as the law outside. I am aware that youth is that stage in life which throbs which energy. I would also not deny that it is that stage in life



Selvi Meenakshi Sabanayagam (Daughter of Chief Secretary) receiving her degree at the hands of Governor Thiru K K. Shah.

when the mind is lured by song and dance. I do not have the slightest intention of stopping all that. But is it not also a sober fact that it is during this stage in life that one should establish—and also initiate plans for the subsequent expansion of—a Knowledge Savings Bank which should contain assets to last a period of 40 to 50 years? If this stage is let go, then how much of strain and suffering has one to undergo for the purpose of seeking that wealth? This is something that could be forgotten only at one's peril.

A large volume of concessions is being offered to provide education to, quench the thirst for knowledge of and accord upliftment to those who, for want of the ladder of Education, could not raise themselves in society but remained depressed and thrust behind. The system of communal representation and the policy to provide concessions are purely for the purpose of extending a helping hand to those who are flung in the abyss; and they are certainly not for enthusing those who seek to nurture controversies on the basis of caste-divisions. Educational institutions should serve to make us men and citizens of this country and they should certainly not be allowed to deteriorate into arenas of caste-warfare.

Let us now listen to the actual lines in Purananooru portraying in robust music the character of the Tamils :

" O Pandya Monarch
towering over
all other kings
of the land !
Your Defence Forces
are composed of
angry elephants
that are trained killers ;

frisking horses
that are fleet of foot ;
chariots myriad
with challenging flags
and fearless warriors
thirsting for action.
And these do speak
of your greatness ;
but the strength of governance
is rectitude first.

Hence,
Your sceptre should not bend
in favour of your kin
nor should it strike down
those other than kin,
in arrogant disregard
of their virtuous qualities..!"

The object of my listing a few instances to illustrate the greatness of the Tamil race in the ancient world is not to place a history-book in your hands but only because I happen to know that you have the capability in you to rewrite the history which the passage of time has dimmed. I am only reminding you of this.

If you learn Tamil, you would be able to understand the ancient history; and if you learn in Tamil, you would be enabled to write the modern history of competition with the new world.

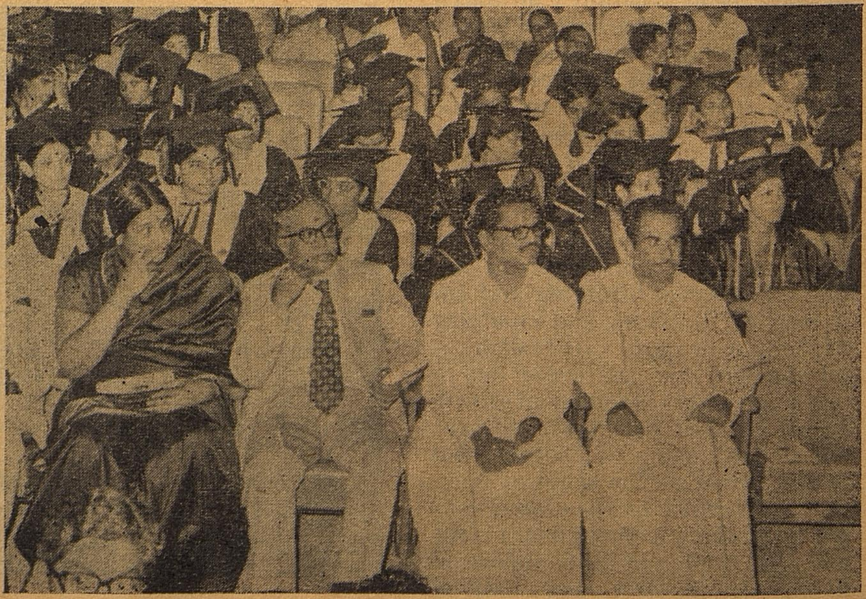
Tamil is Capable

Even ten years back, the determination arose that " Tamil is capable "; and the effort also blossomed. And seven years back we took the pledge to carry to completion the matter of making Tamil the medium of instruction. But what was the result? The " language of the stomach " was kindled in order to counter the fervour for the language of instruction.

Would not Tamil provide food? Would it be sunk in lethargy? Tamil would bring not merely food but self-respect too, we said and proceeded to marshal evidence for that; but all that went to waste—like water flowing in the direction of weeds, like moonlight squandered on the jungle-top. Because Strike-activities and agitations, worked up by kindling the emotions of students, resulted in drawing a curtain over a peaceful background in which alone could proper explanation have been received, the plan for the medium of instruction paused somewhat. Students who are to create the future and their preceptors should strive to dispel this hesitation totally and to accord first place to thought of the mother-tongue.

I would not accept the general argument that they who are proficient in English would be opposed to the principle of making Tamil the medium of instruction. Have we not seen for ourselves that even vegetarians could cook and serve meat to others? Therefore I do believe that English-learned intellectuals would accord concrete shape to our feelings in expanding the scope of Tamil as the medium of instruction and taking the scheme to success. And in that faith I would like to make an announcement and may it be the first stage for total success :

In the present system of University curriculum, Tamil is available as the medium of instruction for only the Pre-University Class and the initial Degree Courses (like B.A., and B. Sc.,). Tamil is not the medium of instruction for the post-



A section of the Convocation Audience

GOVT. HELP FOR P.G. STUDIES IN TAMIL MEDIUM ASSURED

graduate courses ; and as a result, they who have graduated in the Tamil medium do not have the oppor tunity to continue their post-gra-graduate studies in the same medium. *Therefore, if the University authorities would evolve and implement a scheme to make Tamil the medium of instruction for post-graduate studies also, then the Government would welcome that with immeasurable pleasure and extend all necessary aid in this regard.*

CUT YOUR LEARNING TEETH ON TOUGH SUBJECTS

So many explanations and ideas have had to be given out for the question itself as to which language should be the medium of instruction. Next, is it not an important question to be answered, as to *what* is to be studied ?

Thiruvalluvar who said, "Learn thoroughly," proceeded to emphasise, " thereafter, may your conduct be worthy of the learning ". A first reading of the emphasis would not yield the correct meaning. One should be clear in one's mind at the outset itself as to what should be learnt. That one should learn thoroughly is in the nature of general advice. Specialised counsel would be to the effect that one should, in the first instance, decide what all is to be learnt and then commence the task of learning. On that basis, it is my view that if those studying Arts subjects alone were to compulsorily learn one of the Science subjects in addition and if, similarly, those studying Science subjects were to compulsorily learn an Arts subect, then it would go to afford fuller and comprehensive capacity. Combined knowledge of Science and Arts is indispensable for the Students and I would like to point out that it would be appropriate to discuss and decide on necessary changes in the present curricula. When a crawling child cuts its teeth, the practice is still prevalent in rural areas to set two plates in front of the baby, one plate laden with dress-materials and baubles and the other containing sweetmeat ; and elders watch eagerly as to which of the two receptacles the child selects first. Such being the case even in regard to children, is it not necessary that a similar choice is made available to the students who are to bring the blue-print of a new era into being.

TO SHINE AS KORKAI PEARLS

If all were to become Professors, from where would come the Engineers to construct the buildings to serve as venues for the conducting of classes ? It would be a happy development no doubt if Historians were to emerge in strength and bestow on us the valuable findings of their research into the past, but on that account, could we afford to brush aside the growth of experts conversant with the wonders taking shape in the realms of Science. Therefore the Student-fraternity should shine as Korkai pearls in all the fields of knowledge. It was for this reason that Thiruvalluvar said : " Select with care what you have to learn ; and thereafter conduct yourselves in a manner worthy of that learning ".

BE THE MESSIAHS OF RATIONALISM TO PUT FATE ITSELF TO FLIGHT

They who graduate from the Centres of Learning should strive to spread the rays of Rationalism and engage themselves in the task of educating the people of our country to walk in step with the advancing world. To give room even now to fasten the chains of the caste-system and to allow superstitions to rule the roast in the name of traditions would mean that we are deliberately out to mar the younger generation too.

In order to help the world of knowledge to come to blossom, new changes would have to be brought about at the level of the Elementary Education itself. Having forgotten the maxim that it is Effort that leads one to success, he who surrenders the responsibility for everything to some super-human agency and counts his days in futile resignation becomes nothing short of a walking corpse—one who neither himself lives nor works for others to live. It is to prevent the tragedy of such a lowly state that you have taken the weapon of knowledge in your hand. This is something you should not forget. An idealist is one who stands firm in his principles, even if troubles were to assault him as a gale. It is my fervent desire that the names of those who obtain their University Degrees today should find a place in that scroll of honour.

I call upon you all obtaining your University-Degress today, to combat the atrocity of caste-divisions and the evil of casteism, to bring about Equality in the social set-up and an economic order free from disparities, to spread the rays of rationalism everywhere and to enable the country to evolve into an abode for warriors and a home for intellectuals and thereby help to pave the way for unprecedented prosperity. And as I take leave after felicitating you on the honour being conferred on you here, what more could I say than that you alone could establish the truth of the maxim of Thiruvalluvar that they who set their hearts on effort, without fear and without fainting, would be able to put even Fate to flight ?

Chief Minister

Dr. M. Karunanidhi

has delivered 118th

Convocation address

at Madras University,

held on 20—9—1975.

FOR YOU TO SEE TIIC IN FACTS & FIGURES!

THE MOVEMENT FOR IMPROVEMENT IN INDUSTRIAL INVESTMENT•

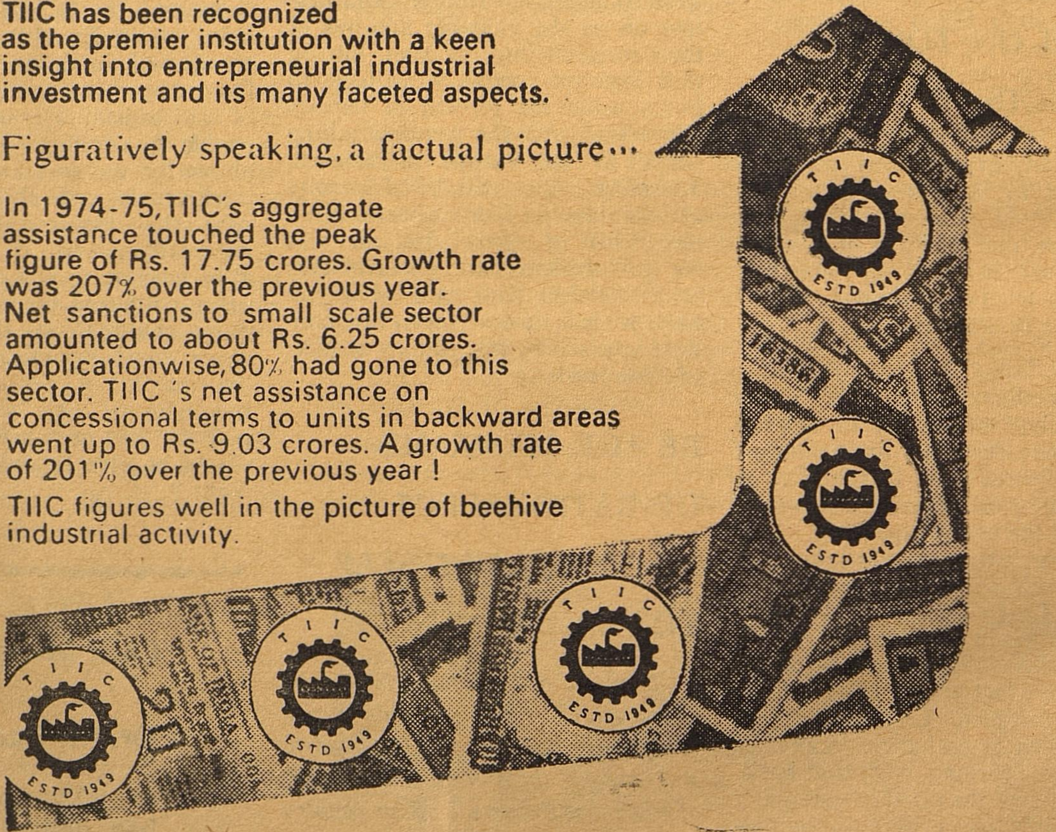
At the moment···

TIIC has been recognized as the premier institution with a keen insight into entrepreneurial industrial investment and its many faceted aspects.

Figuratively speaking, a factual picture···

In 1974-75, TIIC's aggregate assistance touched the peak figure of Rs. 17.75 crores. Growth rate was 207% over the previous year. Net sanctions to small scale sector amounted to about Rs. 6.25 crores. Applicationwise, 80% had gone to this sector. TIIC 's net assistance on concessional terms to units in backward areas went up to Rs. 9.03 crores. A growth rate of 201% over the previous year !

TIIC figures well in the picture of beehive industrial activity.



THE TAMILNADU INDUSTRIAL INVESTMENT CORPORATION LIMITED
"ARULMANAI"
26, Whites Road, Madras-600 014.

Managing Director: S. N. PAI.

Branches at:
Coimbatore,
Madurai,
Salem,
Thanjavur,
Tirunelveli
and Vellore.

TIIC
THE FINANCIAL INSTITUTION WITH A HEART

Service In Prosperity Brigades

—:o:—

Will Count For Preference & Age Computing In Government Service

The prosperity Brigade Scheme was formulated in 1967 with the avowed objective of creating a new social awakening among the masses in order to arouse the spirit of Public Service by utilising Voluntary spare time services of able bodied men and women who are imbued with the spirit of social service and self denial. The Brigade will execute the locally needed works to provide basic amenities through voluntary efforts of the people. It has been, therefore, suggested that the concessions granted to the volunteers of Youth Service Corps may be extended to the volunteers of the Prosperity Brigade. The question of giving preference to these volunteers for recruitment to posts in Public Service has now been examined in consultation with the Tamil Nadu Public Service Commission.

The Tamil Nadu Public Service Commission, which was consulted, has agreed to the proposal to extend the concessions granted to the volunteers in the Youth Service Corps to volunteers of Prosperity Brigade also.

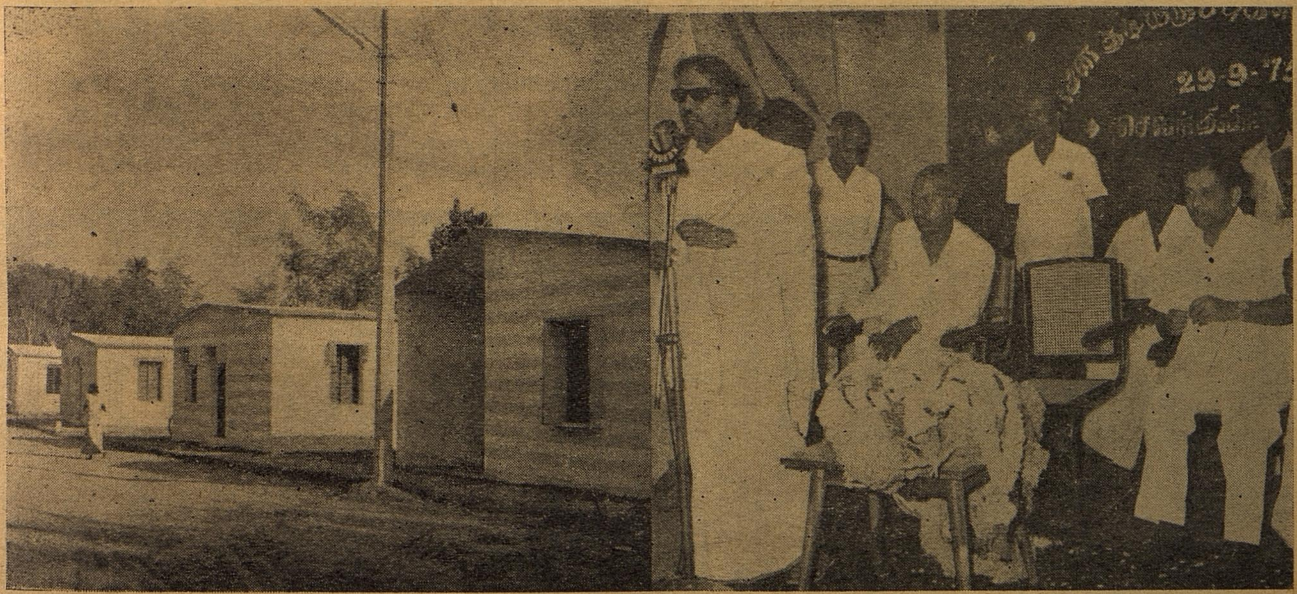
The Government have accordingly directed that the work for one year or more in the Prosperity Brigade may be prescribed as a preferential qualification for recruitment to posts in State and Subordinate Services. The persons who may have worked in the Prosperity Brigade may be given preference provided other qualifications being satisfied.

The Government have also directed that the actual period of work put in as a volunteer in the Prosperity Brigade (Whether Continuous or non-continuous), subject to a maximum of two years, be excluded while computing the upper age limit for appointment to posts in the State and the Subordinate Services.

The volunteers, who may have worked in the Prosperity Brigade should produce evidence of the fact that they had actually worked in the Prosperity Brigade for such and such period when they apply for a post.

The Special Officer (Prosperity Brigade) and Ex-Officio Assistant Secretary to Government, R.D. & L.A. Department is authorised to issue such certificates in respect of the Prosperity Brigade volunteers in Madras City, and in respect of other places the Panchayat Union Commissioners are authorised to issue the certificates.

The Government have further directed that there should be no reservation of vacancies for candidates who have worked in the Prosperity Brigade. These candidates can only be shown preference, provided other qualifications being satisfied in the matter of recruitment to the Government Service. **



Houses for Harijans in Tamil Nadu are solid structurers given free. The Government of Tamil Nadu is committed to giving 30 000 such houses to Harijans by the end of Oct, 75. Above the Kattuputhur, Trichy Dist.. scheme is being distributed to allottees by C. M. on 29-9-1975.

BOOK ON NON-FORMAL EDUCATION FOR WOMEN

Picture above shows Dr. V.R. Nedunchezhian Minister for Education and Tourism releasing on 24—9—75 a book on Non-formal Education for Women. The recepient of the first copy is Dr. Malcolm Adiseshiah, Vice Chancellor, University of Madras.

In this context it will be appropriate to recall that in Tamil Nadu, a comprehensive survey on all non-formal education activities had been completed by the Tamil Nadu Board of Continuing Education. There are 134 schemes of general and occupational education and training covering over 6 lakh persons. Among the programmes, the most effective are industrial training programmes run under the Apprenticeship Act and by the Polytechnics and Engineering colleges. Agricultural education is also good but is quantitatively reaching only a small number of farmers. The Tamil Nadu Agricultural University trains 140 farmers in 12 blocks in the Coimbatore district in improving farming practices. An evaluation of this educational effort shows that while difference in age, education, economic status, media participation and castle did not significantly influence variation of their farming technology and knowledge, there was a relation between knowledge, the extent of land holdings and the social status of the farmers. Another important finding was that only by transforming agricultural research results into non-formal education curriculam can extra yield be produced.

ABOLITION OF HORSE RACING

Had Gandhiji Been Alive—He would have been All Praise for Tamil Nadu.

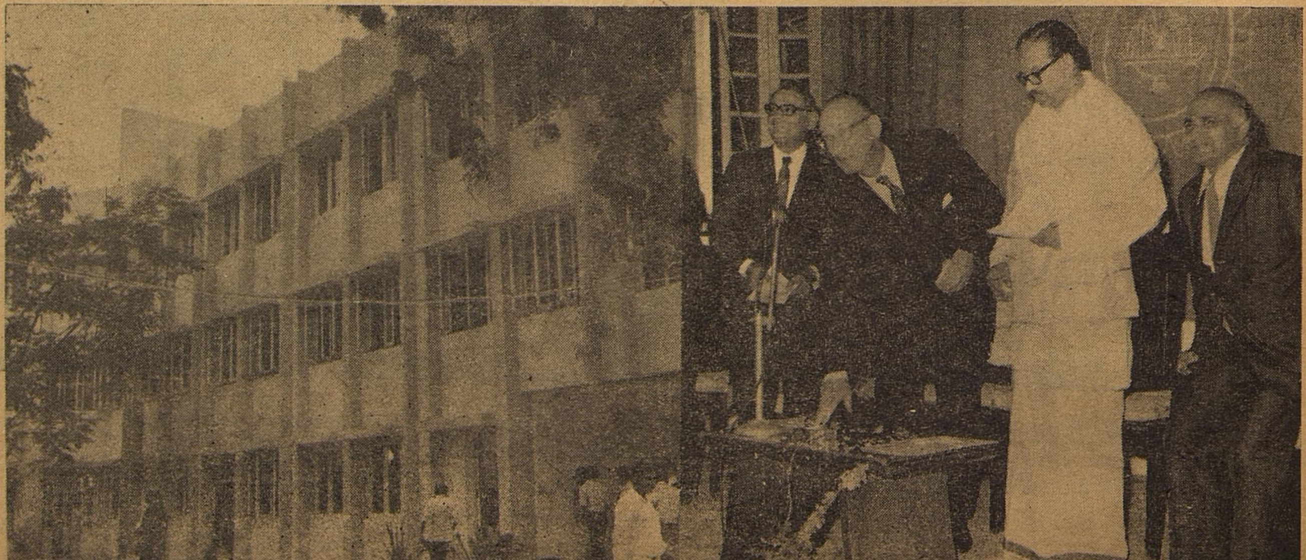
" Of all the states in India, with the exception of Gujarat, Tamil Nadu is the only State which has firmly implemented the Prohibition Policy. In this State which is governed by the D.M.K. Party, a move in the right direction was made some time ago by imposing a ban on horse racing. The Government have now not only stopped their own lotteries, but have also prohibited in the State, dealings in lotteries of other States. Would that, the other Indian States follow in the footsteps of this State, in the matter of prohibiting intoxicants and gambling !

Had Gandhiji been alive today he would have showned high praise for these commendable actions of this State."

The above is a translation of an extract of a publication in the Urdu weekly published from Lucknow—Sidqe-Jadeed—edited by the renouwned scholar Abdul Majid Daryabadi, who is considered the greatest jurist of Islam in India today. Incidently the editor and the Late Dr. Zakir Hussain Sahib were great friends.

Janab Abdul Majid Sahib has written a commentary on the Holy Quran which has received great appreciation. The Sidique-Jadeed reaches a sophisticated and intellectual readership.

One more hostel for girl students come up in the City when Dr. Gunter Diehl, Ambassador of Federal Republic of Germany declared open the hostel of School of Social Work on 24—2—75.



TAMIL NADU IS AHEAD OF ALL OTHER STATES IN INDIA

BOMBAY WEEKLY'S PRAISE FOR DMK GOVERNMENT

The Prestigious Bombay Weekly " Commerce ", after an exhaustive and thorough-going inquisition into the implementation of land reform measures in the 12 States and 4 Union Territories of India, has made out that Tamil Nadu is ahead of other States in the implementation of land reforms. It is worthy of note that this weekly made it a point to verify the difference between legislation and implementation of land tenure reforms. The report published in " Commerce " dt : 13-9-'75 as far as it relates to Tamil Nadu is as follows :—

Tamil Nadu is ahead of other States in the implementation of the land reforms and the DMK Government has taken many measures towards attaining the objective of tillers owning the land. A recent measure adopted by the Government confers on the tenants the right to purchase the lands which they had been cultivating for several years by paying the value of the lands in easy annual instalments. The Act, has, however, ensured that the poorer and the small landowners were not affected adversely. The setting up of tenants financing corporation to assist poor tenants to purchase the lands from owners is under contemplation. The ceiling of land holdings is now 15 standard acres, although the definition of the standard acres varies from district to district, depending on the irrigation facilities, soil fertility, etc. The DMK Government has undoubtedly been quite vigorous in implementing the land reform measures as can be seen from the fact that the built of a land distribution took place only after the Government took office in 1967. The total area of surplus lands notified is 98,653 acres, of which 74,459 acres were notified after 1967. Before 1967, no land was assigned to any landless person, whereas after 1967 about 54,769 acres were assigned benefiting 29,542 persons. The State Government got a law passed in 1971 conferring ownership rights on agricultural labourers occupying Kudiyiruppus (homesteads) as on June 19, 1971 either as tenant or as leasee. The Act extends to all the districts, except Madras and a few pockets of some districts and municipal areas but does not extend to plantations. A law was passed in 1969 for preparing records of tenancy rights. The total number of tenancies registered so far is 399,350 covering 603,898 acres. From 1972 on a scheme has been in operation for the supply of patta pass book to each ryot. These books contain authenticated particulars of their holdings. The DMK Government has assigned 7.05 lakh acres of land to four lakh landless people.

The Tamil Nadu Government promulgated an ordinance in January this year granting a moratorium for one year on the recovery of debts incurred by agriculturists of the drought-affected areas.

**

MANUNEEDHI THITTAM OF STATE ELECTRICITY BOARD

METHODS ADOPTED

The Tamil Nadu Electricity Board has introduced " Manu Needhi Thittam " (-as Contact Programme) on 15—9—75 by which the Electricity Board officials will go to the consumers and people and dutifully listen to their complaints and grievances and make all efforts to redress them on the spot where possible and where it is not possible to have it done with least delay.

To start with the " Manu Needhi Thittam " will be introduced at the Panchayat Union level and the Officers of the Board not below the rank of an Assistant Engineer will convene a meeting at the Panchayat Union Headquarters on the day on which the Panchayat Union meets with a view to take advantage of the presence of the Panchayat Union Chairman and Council Members along with the public. The local M.L.A's and M.P.s will be invited specifically. Advance publicity for the meeting will be given so as to enable the people in the area to know the date of the meeting.

A special Register of public grievances will be opened by the Assistant Engineer for each Panchayat Union and the register will be open to inspection to Superior Officers of the Board at all times. All written petitions and complaints will be received and given an acknowledgement slip before the meeting is over. The Assistant Engineer will indicate the action proposed to be taken in the acknowledgement slip and indicate the time limit also. If the grievance or complaint is not remedied within the time limit, the party may approach the Assistant Engineer or higher authority for further action.

In addition, the Divisional Engineers and Superintending Engineers will make themselves available at their Headquarters on any particular day notified by them during each month for receiving grievance day petitions from the public. All these petitions will be entered in a Register and follow up action taken till a state of finality is reached.

The public are requested to extend their full co-operation for successful implementation of " Manu Neethi Thittam " introduced by the Tamil Nadu Electricity Board.

By
Thiru. C. THANGARAJU,
Secretary,
Tamil Nadu Electricity Board.

THE TRULY GANDHIAN APPROACH TO PROHIBITION

ORTHANADU EXAMPLE CITED BY GOVERNOR

" The people's committees formed in Orathanad taluk, Thanjavur District, to keep a watch on illicit liquor trade is worthy of emulation. The people in the taluk have formed village committees consisting of able bodied youngmen and former prohibition offenders. These committees detect illicit distillation, watch the activities of suspects and carry on sustained propaganda against the evils of drink. I feel that the Orathanad example is bound to be a pace-setter for the people's participation in welfare schemes in Gandhian way."

So said the Governor of Tamil Nadu in praise of the special missionary fervour for enforcing wholehearted prohibition action in a small Town Orathanad, a taluk head quarters in West Tanjore of Tamil nadu. Orathanad stands as a striking example for people all over India to uphold and perpetuate the prime Gandhian doctrine of complete imposition of total prohibition with people's participation.

What did they do?

What did the people of Orathanad do to give such a reality to a cherished Gandhian dream ? The question deserves to be posed everywhere due to its well nigh impracticability! " Nothing but a self determination," said the Vice-President of Taluk Prohibition Committee, Thiru R. Durairajan, " and a rededication to a principle of great common good. At first a Taluk Prohibition Committee was set up free from caste, colour, creed, by enlisting all the individuals, who were sentenced mainly under prohibition offences, besides village people's voluntary enrolment in the Committee."

Further, he explained with a tinge of sadness that illegal distillation of country arrack was misconstrued by so many villagers as a perennial source of income in that area and so it had developed into a cottage industry of permanent footing in a situation, conducive to village atmosphere. He said that the reimposition of prohibition in Tamilnadu meant no difference to the poor as nobody realised and relished its social importance and so people thought that there could be no solace to this area, unless the importance of prohibition was brought home to them with serious consideration, and vigour born out of voluntary social endeavour from within. This can never be enforced from outside.

A crusade won

" Indeed, Orathanad registered the highest incidence of the offences of prohibition cases in Tamilnadu," said the Inspector of Police Thiru N. Ramasamy, " so we tried to bring out a consensus between local people and police, purely on ethical grounds. Because, the police force sometimes became strengthless in arresting drunkards as there was nobody available to be a witness in supporting the prosecution. On some occassions, people will come in battallions to revolt against the police, demanding the immediate release of even habitual drunkards. So we determined to inculcate the need of a common arrangement and understanding of local inhabitants and Police in eradicating this social stigma. I hope, we have won in our crusade."

Truth to tell, the pre-prohibition period of this peculiar area was full of embittered relations. For example, in Orathanad area, no decent man was allowed to be free from the verbal insults and physical attacks of drunkards. Alas! The drunkards dominated and out-numbered local people in all village festivals, carnivals including auspicious marriage and social gatherings. Unescorted fair sex felt the poignant need of protection even for an easy stroll even in her once familiar streets. Every day police had to register at least 20 cases of intense cruelty due to heavy drunknenness.

What use is An Intimidated Police ?

The problem was looked at in various dimensions and at last it was concluded that unless the Police were vouchsafed support of the people, enforcement of prohibition and thus to punish the law-breakers was well nigh impossible. An intimidated Police is of no value to the community! It was in this perspective that a prohibition committee was formed with a view to educate and advise the drunkards to become responsive to the tenets of prohibition and respect the law of the land. This committee comprises youngsters imbued with the cause of social uplift, village munsifs, and Karnams, Presidents and members of Pancha-

yats, Village Credit Bank Presidents, hereditary local chiefs and students. This Committee hauls up the drunkards red handed and hands them over to the Police for further legal actions. The action committee also enjoys the sole privilage of bailing out the drunkards on his bahalf of his crime is bailable in nature and then teaches such persons to accept the offence in the Court and face the consequences unflinchingly. Above all, the committee both unearth and destroy instantly the hidden fermented and undistilled arrack, its production apparatus, stocked arrack pots and bottles in the spot with due intimation publicly through an an-noucement by tom-tom.

Having a ceaseless and constant vigil over the drunkards, the committee also envisage and prevent all possible opportunities which will entangle the drunkard to go on a spree or a bout. If a drunkard under influence of alcohol is trapped for the first time, the committee exercises generosity to fine him Rs. 25/- and his second or subsequent misconduct will miserably end in severe Police custody with no kith and kin to bail him out in that area due to the non-availability property certificate from Karnam or Munsif as all who can bail him out is a member of the enforcement committee. The amount collected by the Committee in fining the drunkard will be spent only for village welfare. An individual who gives correct clue to the committee about the drunkard is entitled to get a reward of one third of fine collected from the offender with future protection from the menace of drunken vengence.

High Drama in Family Circles :

A son handed over his drunken father while a desperate wife handed over her useless drunkard husband to the committee. An youngster by name Manickam in a village Echankkottai was made to rejoin his wife Dhanam, only after he had for sworn his appetite for drinks and had proved his capacity to resist the bucolic temptation for a number of months!

Orathanad taluk has a population of 1,50,744 and 110 village prohibition committees have been constituted among them for administrative feasibility. These Committees have enrolled 5,171 members and with their help prohibition has become absolute and strictly enforced in all the 203 villages which includes 83 major villages and 120 hamlets of the taluk. The incidence of prohibition offences was reduced to 128 upto January, 1975 and none was registered after that. In Thiruvonam Committee, as sizeable number of 56 female members have fervently joined the Enforcement Committee.

" We have been maintaining a strict prohibition order in our village and till date no addict was found arrested here for drunkenness, " says Thiru Chitravelu, the Panchayat President of a small village Urandarayan Kudikkadu, situated in Orathanad Taluk, enroute to Pattukkottai, " because we 900 inhabitants have exercised restraint on consumption of liquor in any form and none is addicted as a result of our self-restraint."

This is how Orathanad is bringing reality to a Gandhian dream.

By

PINNAI A. PANNEERSELVAM, M.A.

The THIRD SIDE OF PAPER !

That's Quality.

And that's what gives smooth, uniform strength and body to paper, besides a nice, functional finish to the two sides.

JUST AS IN PAPERS FROM SESHASAYEE'S

SPB

The Watermark of Quality

Seshasayee

Paper and Boards Ltd.

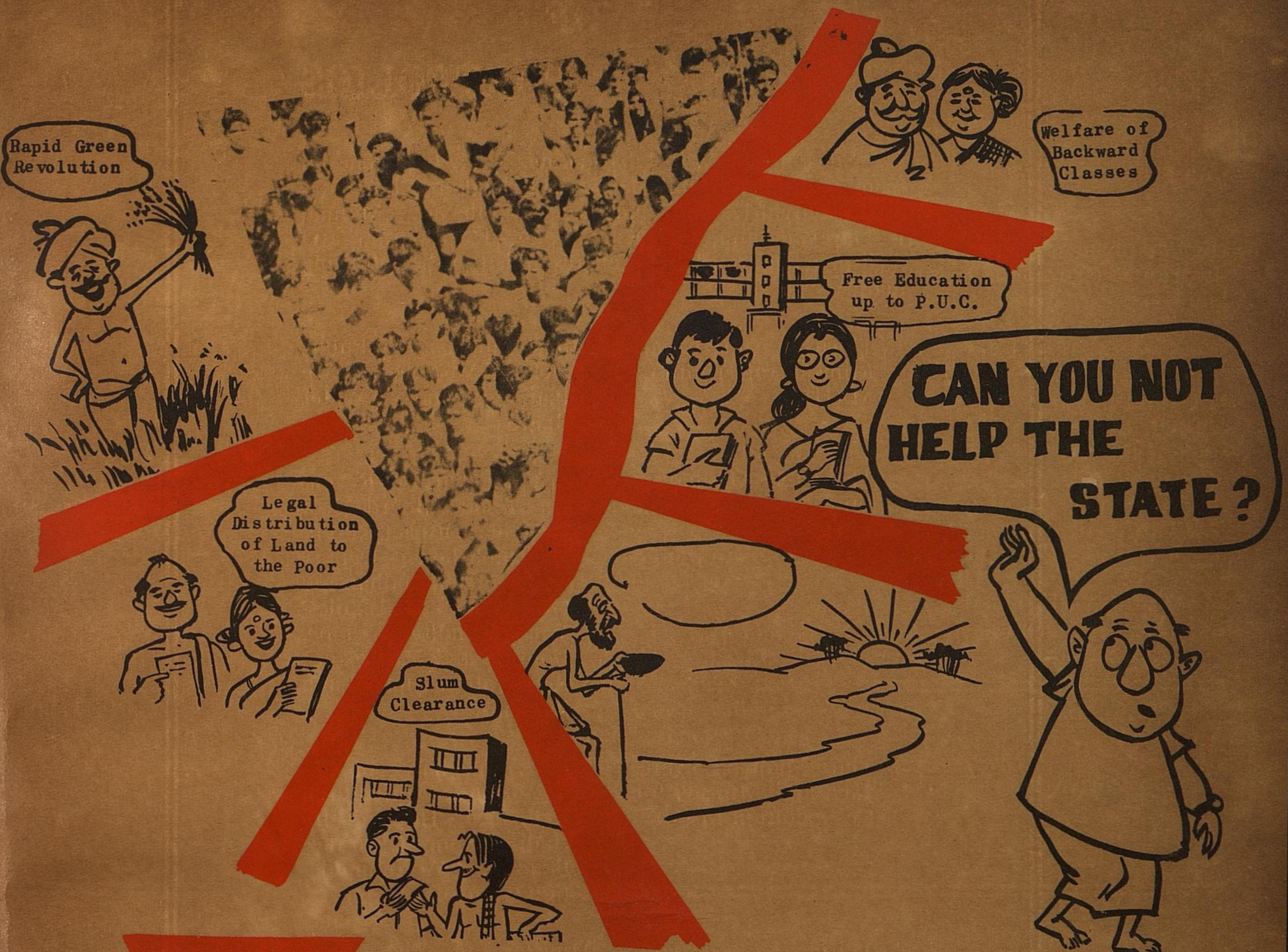
MAKERS OF QUALITY WRITING AND PRINTING PAPERS

PALLIPALAYAM, SALEM DT., SOUTH INDIA.

REALLOCATION OF PORTFOLIOS

Since Thiru A. P. Dharmalingam has been relieved from his Ministership, the subjects held by him and Thiruvalargal K. Anbazhagan, S. Madhavan, Mannai P. Narayanasami, M. Kannappan, K. Rajaram and S. Ramachandran have been reshuffled in the following manner.

1. Thiru K. Anbazhagan, Minister for Health M (H)	Minister in charge of Public Health, Medicine, Town Planning and Water Board.
2. Thiru S. Madhavan, Minister for Revenue M (R)	Minister in charge of Revenue, Food, Board of Revenue, District Revenue Establishment, Deputy Collectors, Bhoodhan and Gramdhan, Textiles, Yarn, Handlooms, Law, Courts and Prisons, Registration and Land Reforms.
3. Thiru Mannai P. Narayanasami, Minister for Co-operation M (C)	Minister in charge of Co-operation, Agricultural Refinance, Housing including Slum Clearance Board and Accommodation Control.
4. Thiru K. Rajaram Minister for Labour & Transport M (L & T)	Minister in charge of Labour, Transport, Nationalised Transport, Motor Vehicles Tax, Legislation and Weights and Measures, Statistics, Employment and Training and Ex-Servicemen.
5. Thiru S. Ramachandran, Minister for Local Administration M (L.A.)	Minister in charge of Municipal Administration, Community Development, Panchayats, Panchayat Unions, Stationery and Printing and Government Press.
6. Thiru M. Kannappan, Minister for Religious Endowment M (R.E.)	Minister in charge of Religious Endowment, Khadi & Village Industries, Rural Industries Project, Milk, Operation Flood Project, Tamil Nadu Dairy Development Corporation, Information & Public Relations and Film Technology, Youth Service Corps and Prosperity Brigade.



Despite these Achievements
Rising Population Raises Problems

SURELY YOU CAN

by PLANNING YOUR FAMILY

DEPARTMENT OF HEALTH SERVICES AND FAMILY PLANNING

Regd. No. M. 8676-A

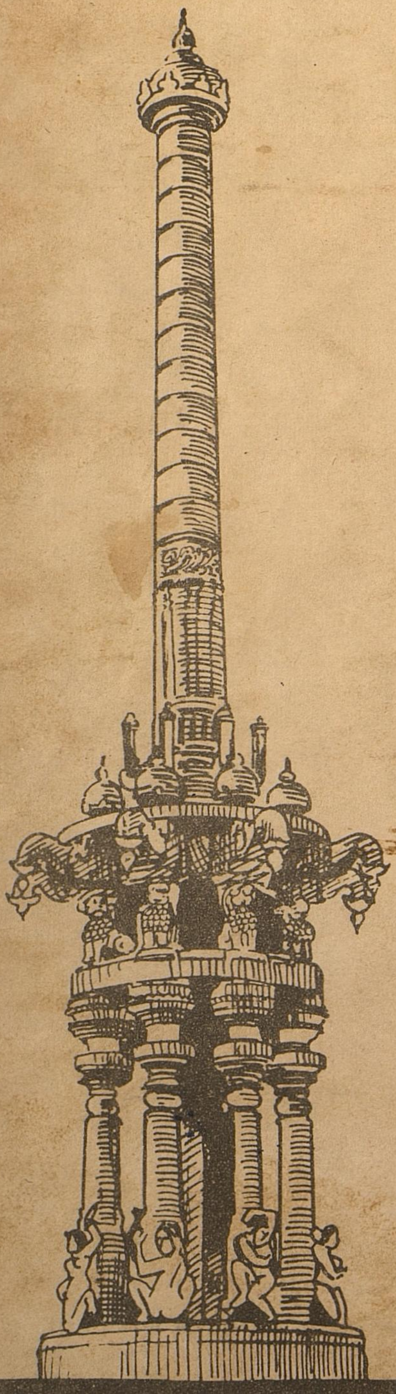
VISIT
THE ART GALLERY AT
POOMPUHAR

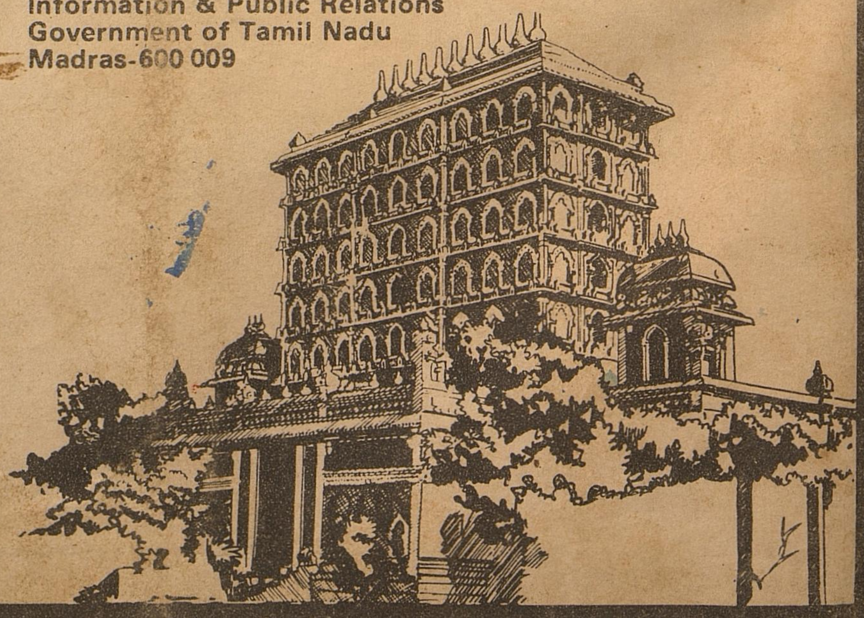
- Where the stones tell a tale and recapture scenes from *Silappathikaram*, the ancient Tamil classic;
- Where a city sunk beneath the wave comes glowingly alive!
- A feast for the eyes — and food as well for thought — that's what you get at Poompuhar.
- The *piece de resistance* is the exquisitely carved statue of Madhavi, the temple courtesan.

COME...SAVOUR THE SCULPTURAL DELIGHTS OF THE POOMPUHAR ART GALLERY

Poompuhar is 21 kilometres from Sirkali and 29 kilometres from Mayavaram

ISSUED BY :
Director,
Information & Public Relations
Government of Tamil Nadu
Madras-600 009





EDITED AND PUBLISHED BY THE DIRECTOR OF INFORMATION AND PUBLIC RELATIONS, GOVERNMENT OF TAMIL NADU AND PRINTED AT THE TAMIL ARASU PRESS, GOVT. ESTATE, MADRAS-600002.